

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

+

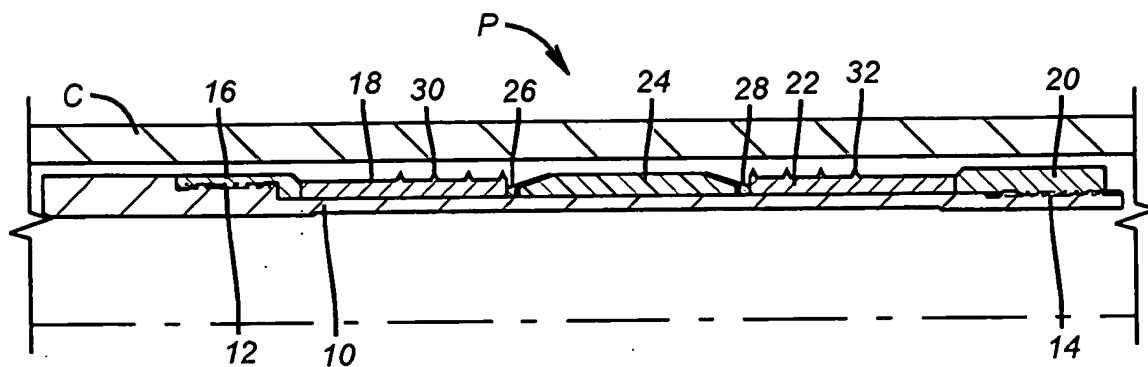


FIG. 1

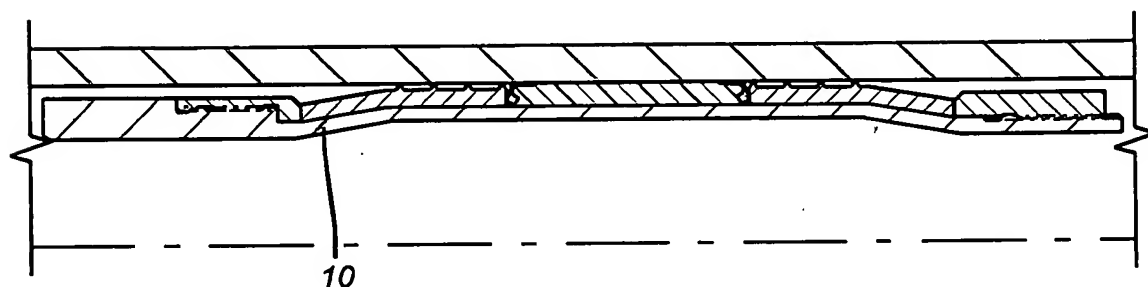


FIG. 2

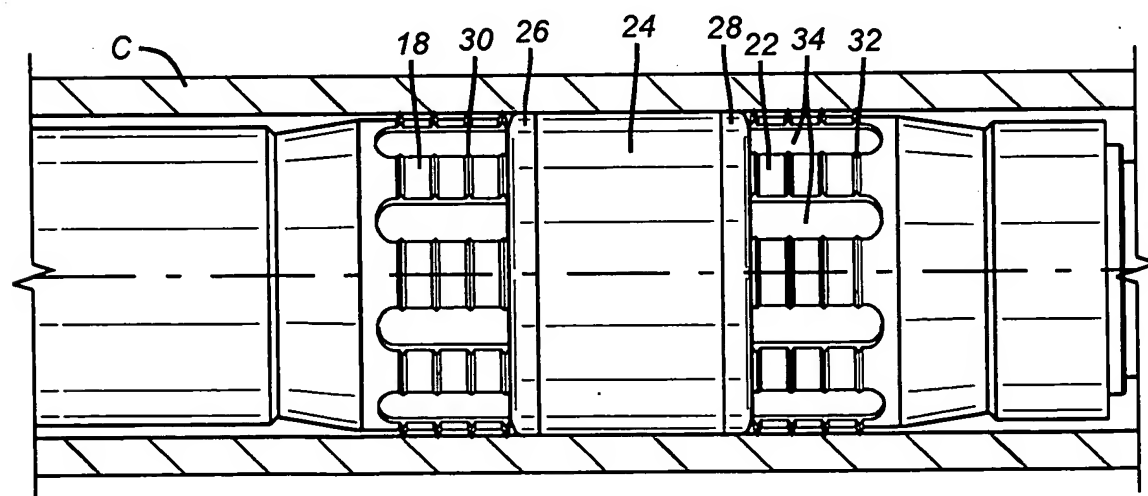


FIG. 3

+

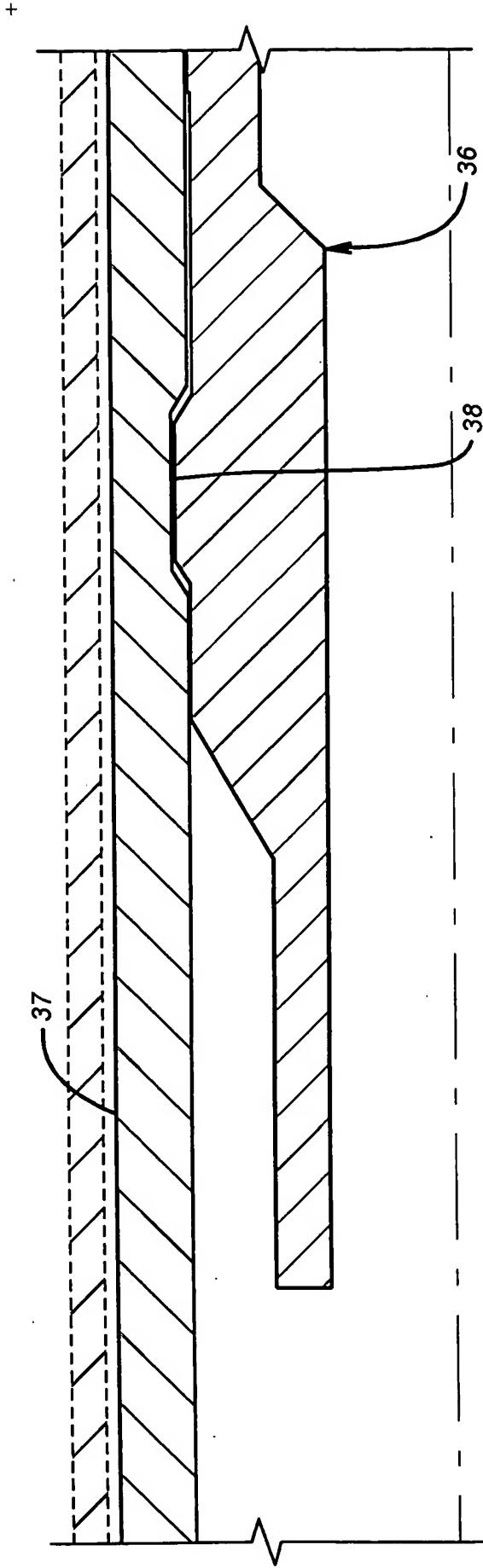


FIG. 4a

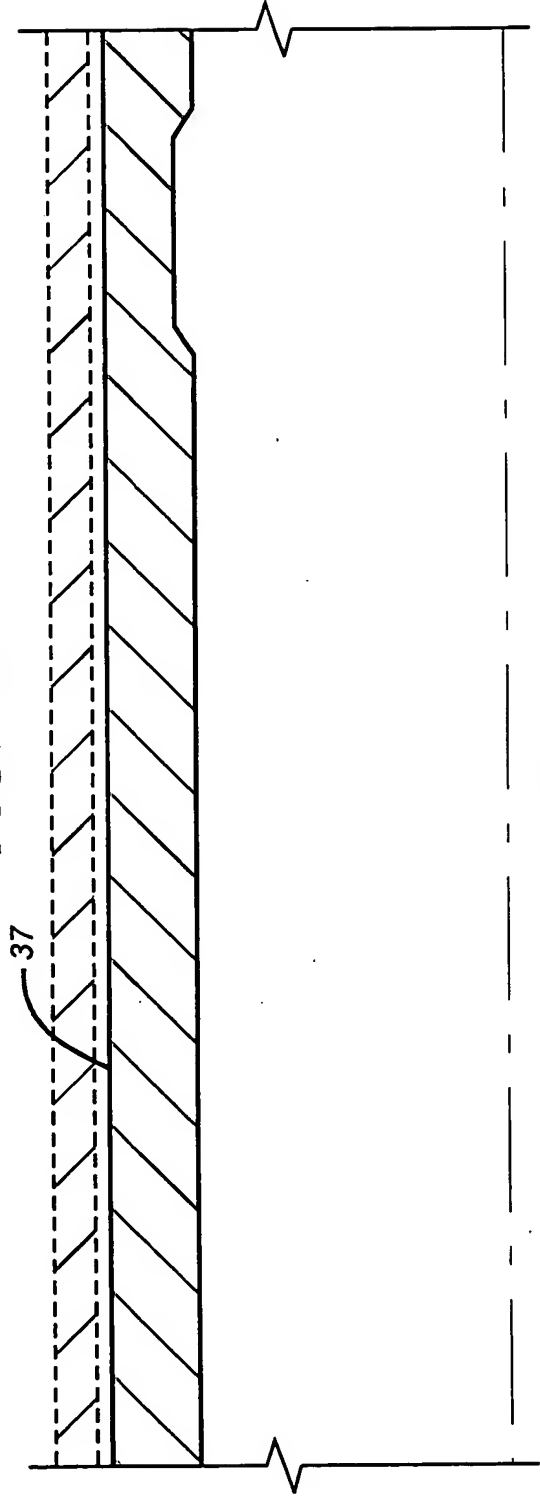


FIG. 5a

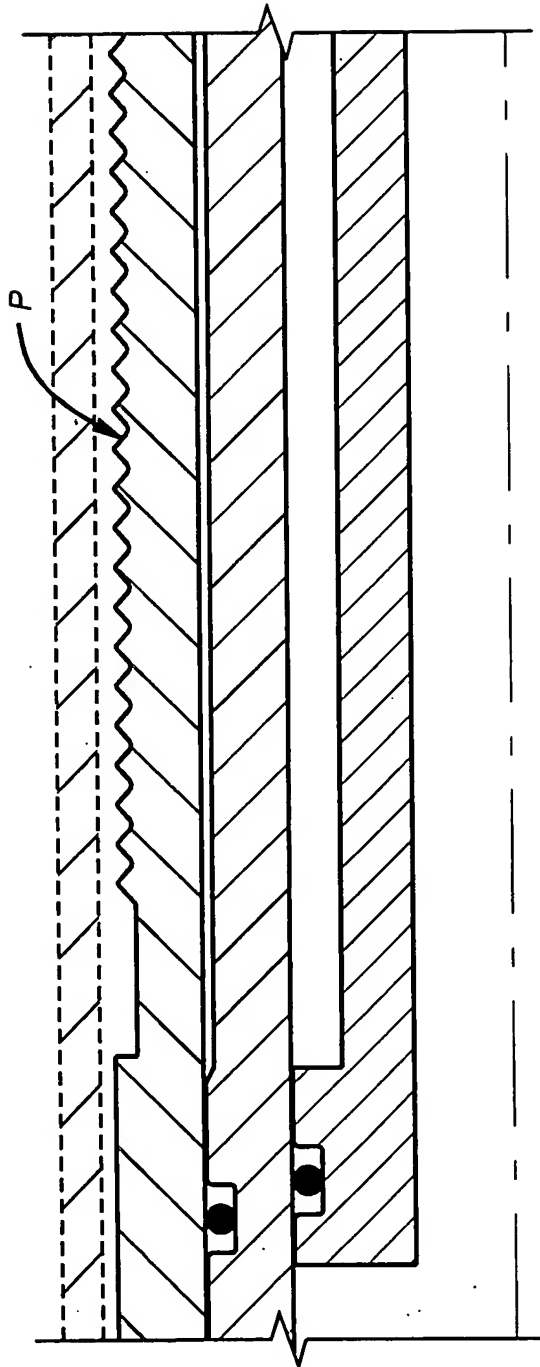


FIG. 4b

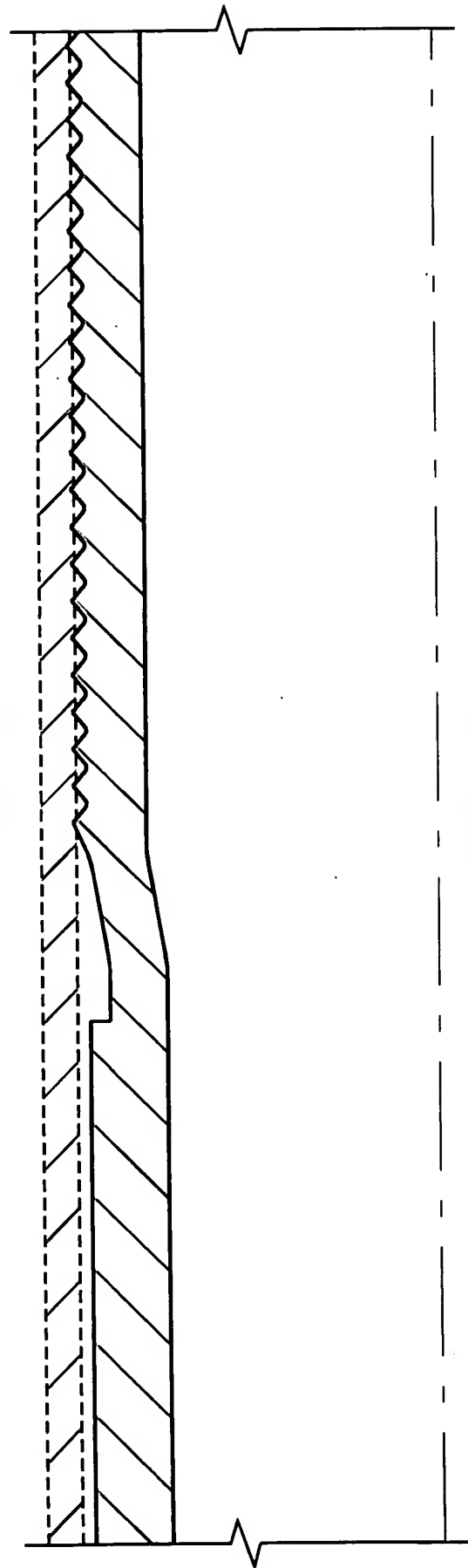


FIG. 5b

+

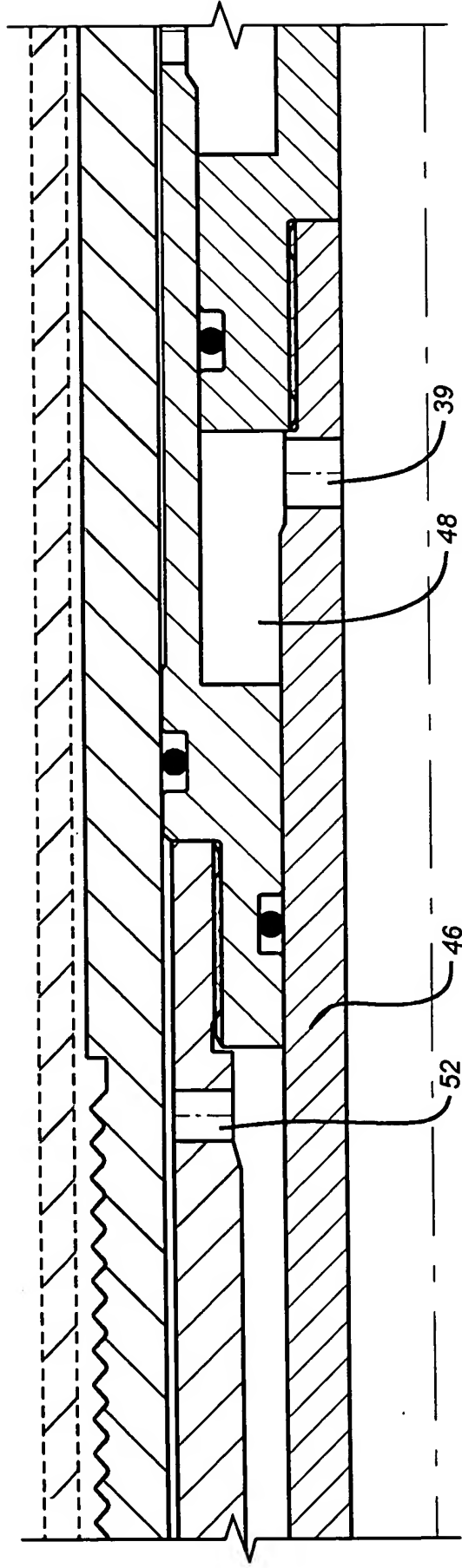


FIG. 4c

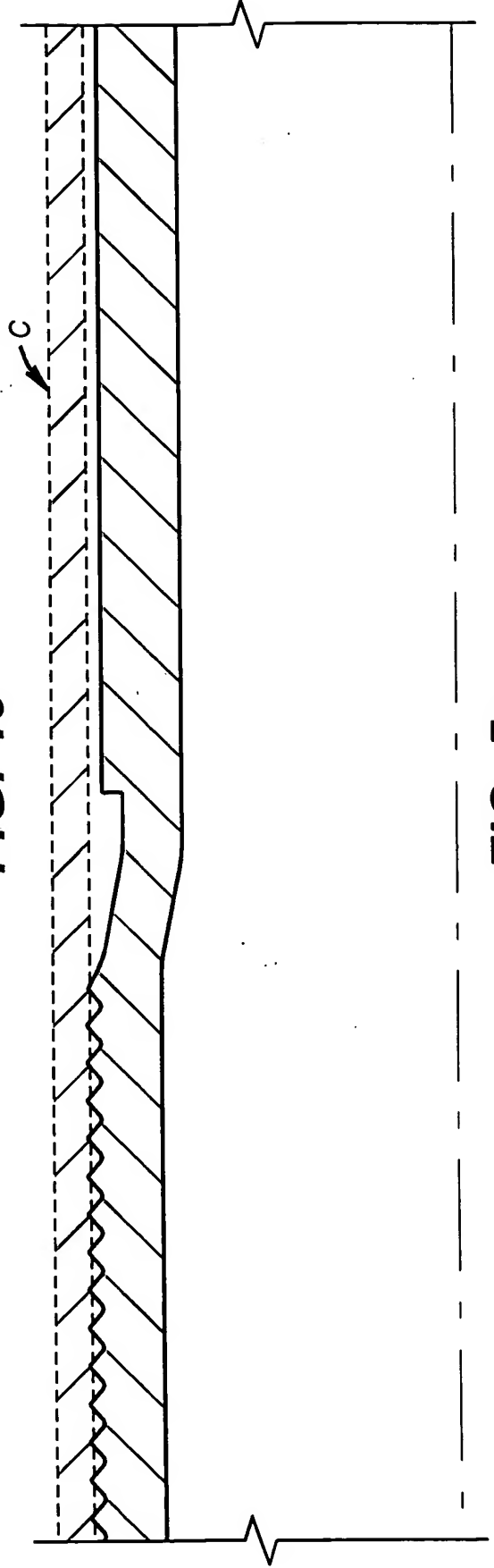


FIG. 5c

+

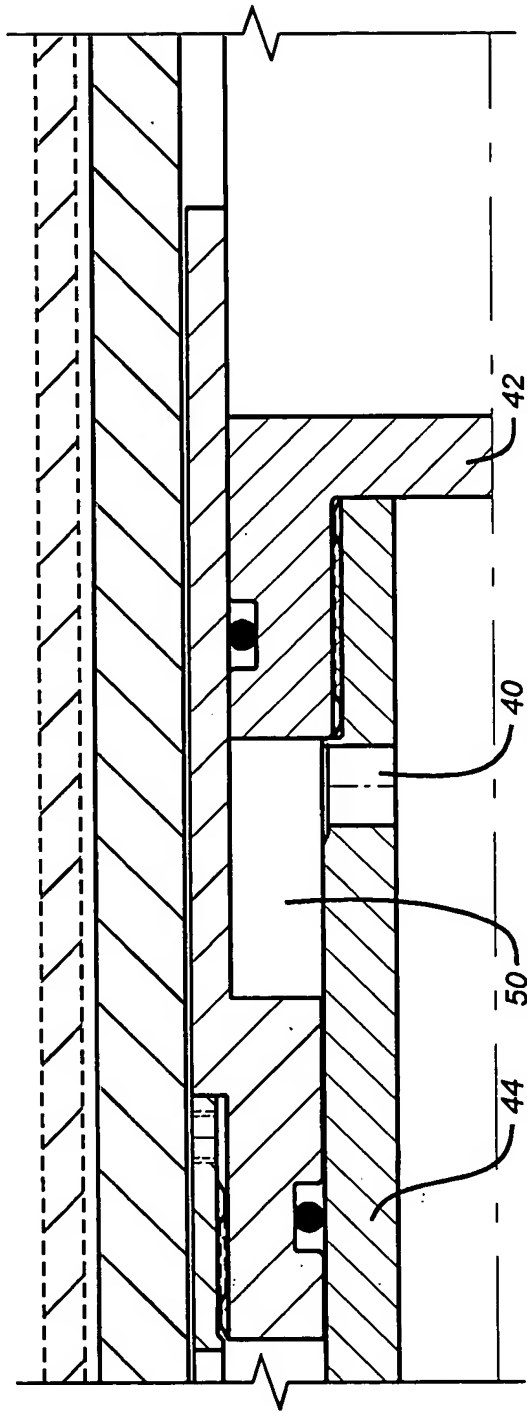


FIG. 4d

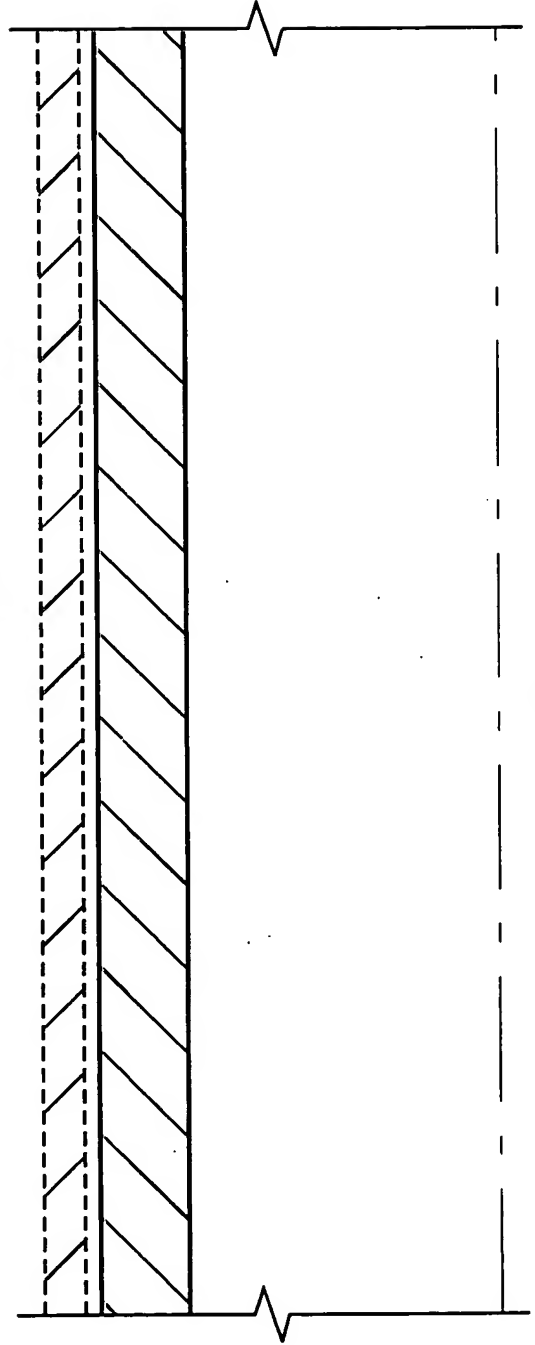


FIG. 5d

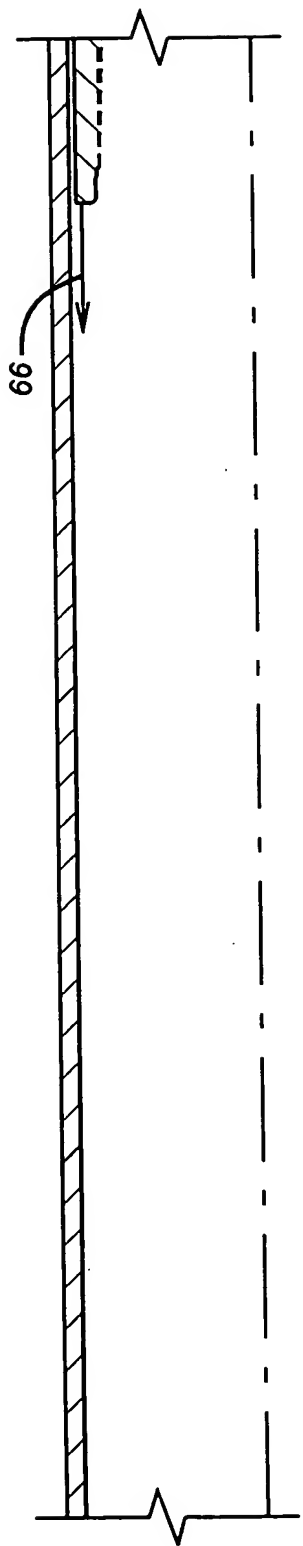


FIG. 6a

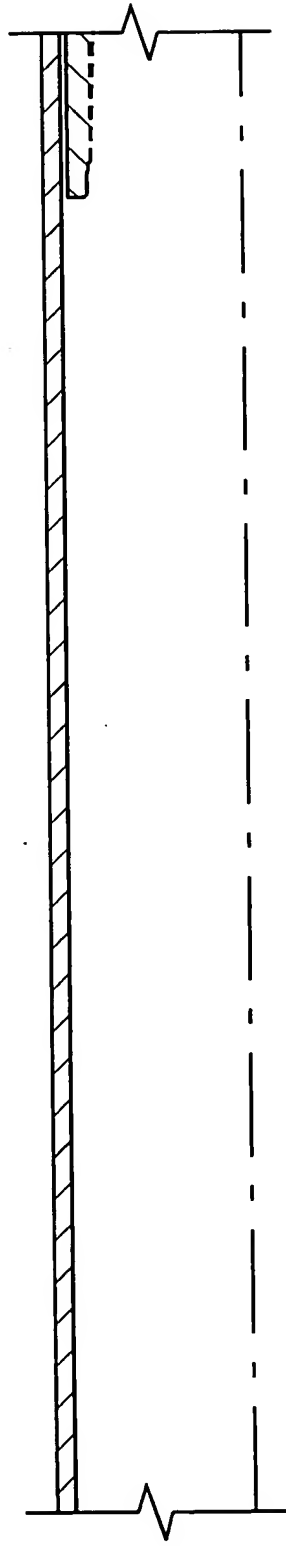


FIG. 7a

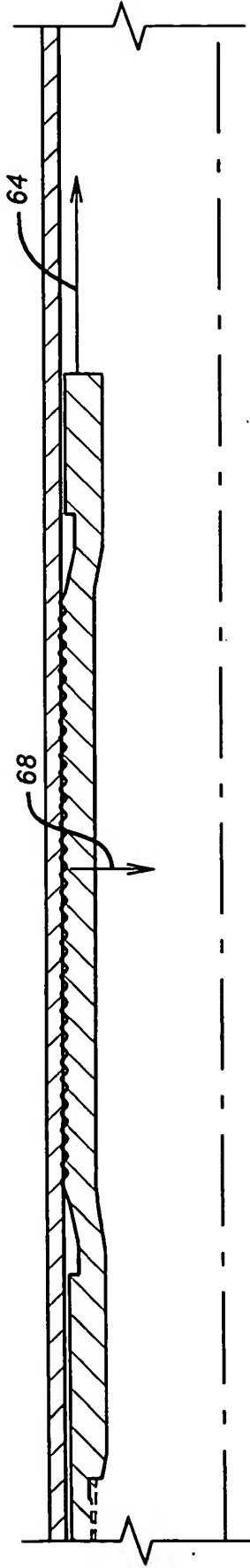


FIG. 6b

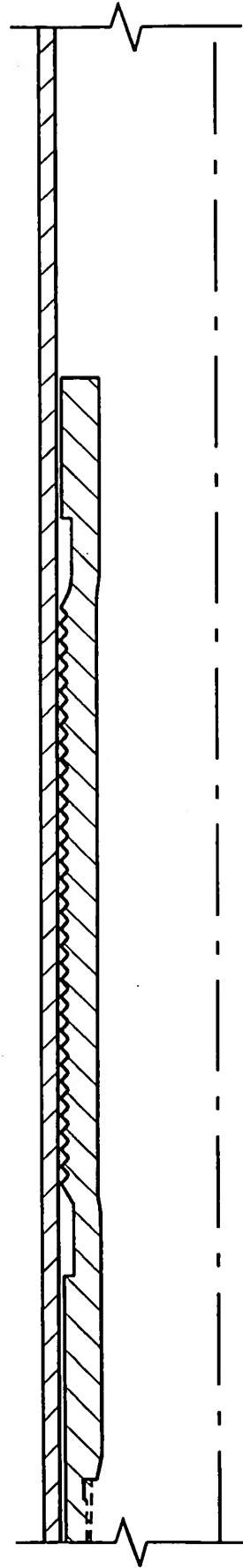


FIG. 7b

+

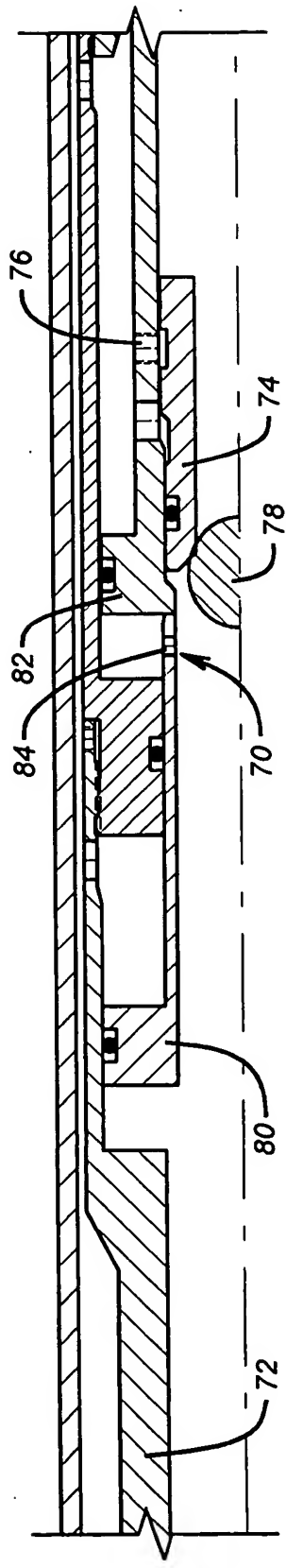


FIG. 8a

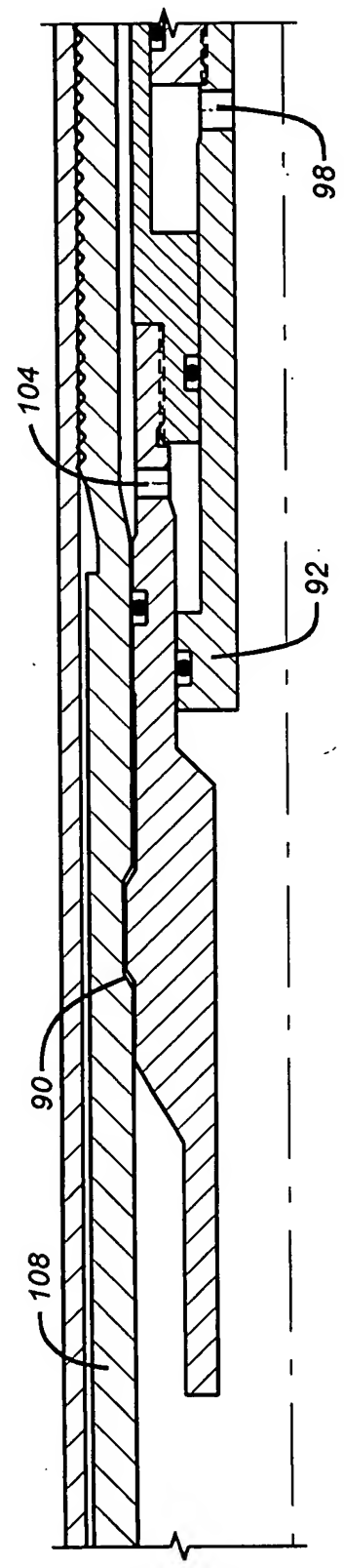


FIG. 9a

+

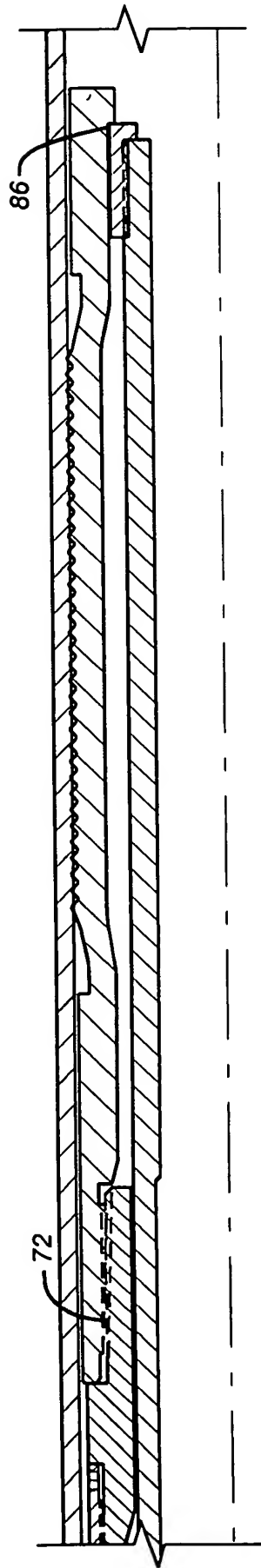


FIG. 8b

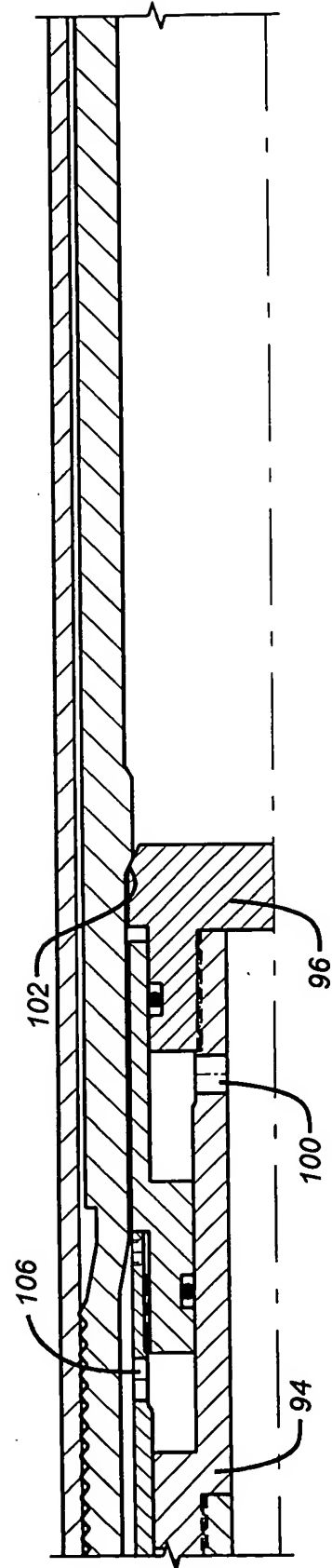


FIG. 9b

+

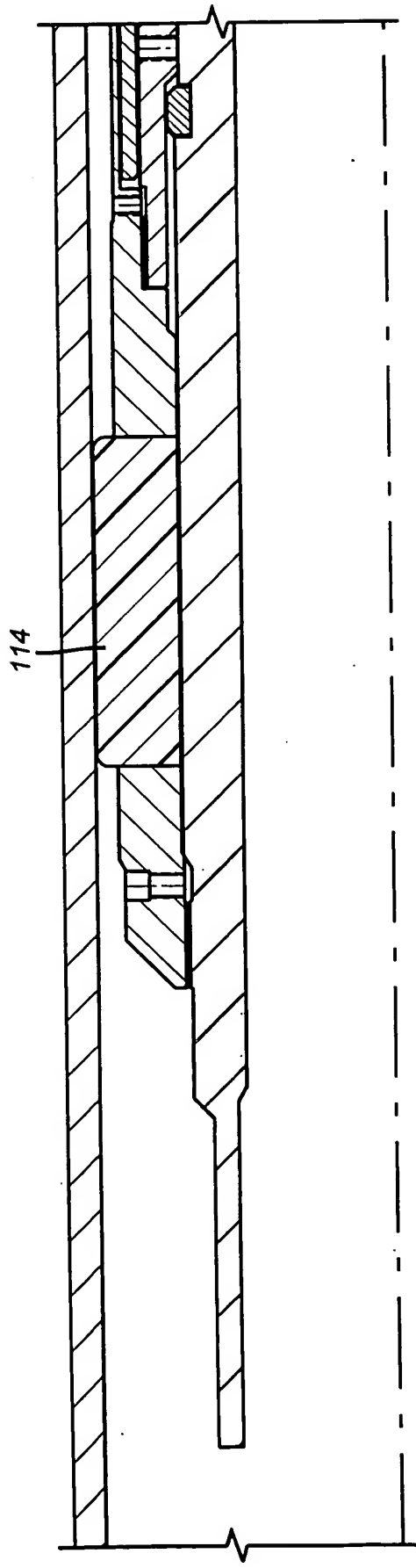


FIG. 10a

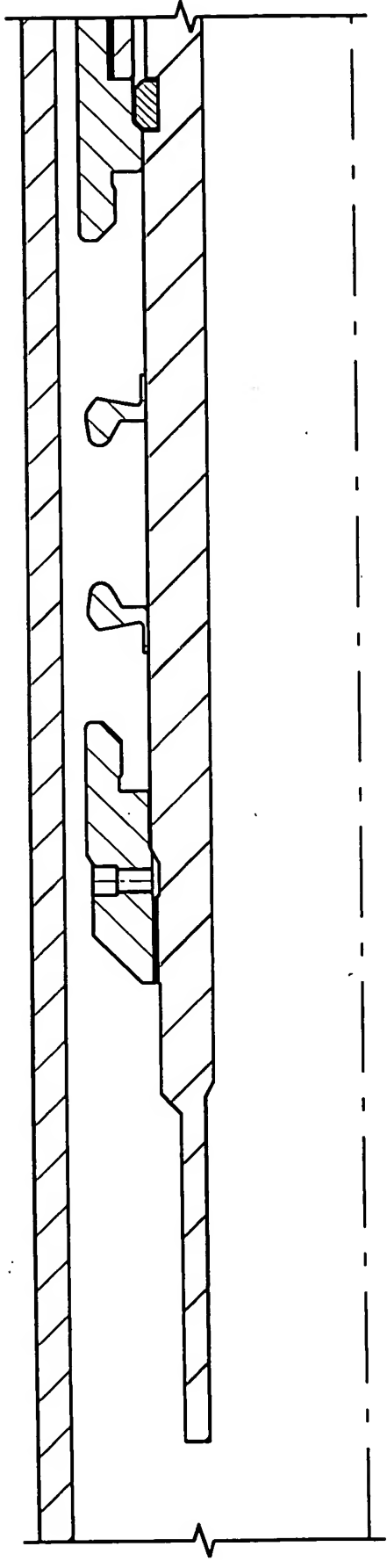


FIG. 11a

+

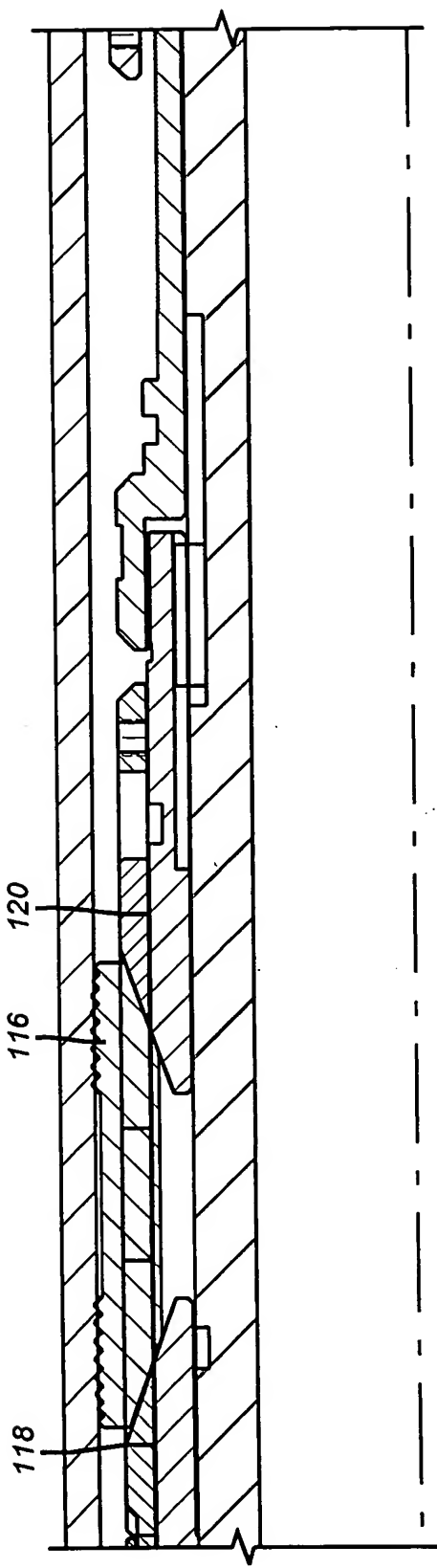


FIG. 10b

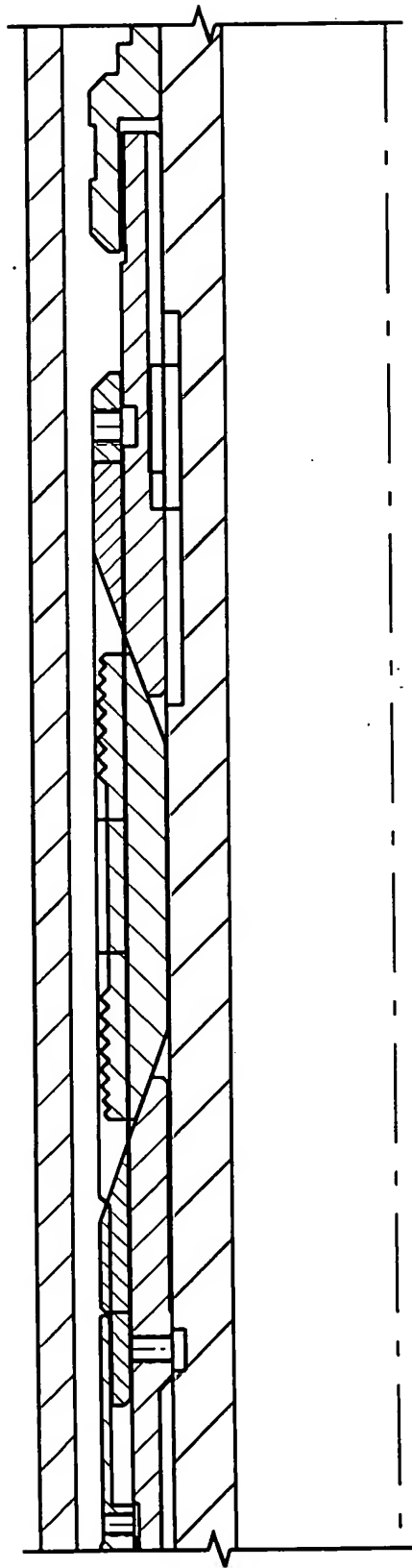


FIG. 11b

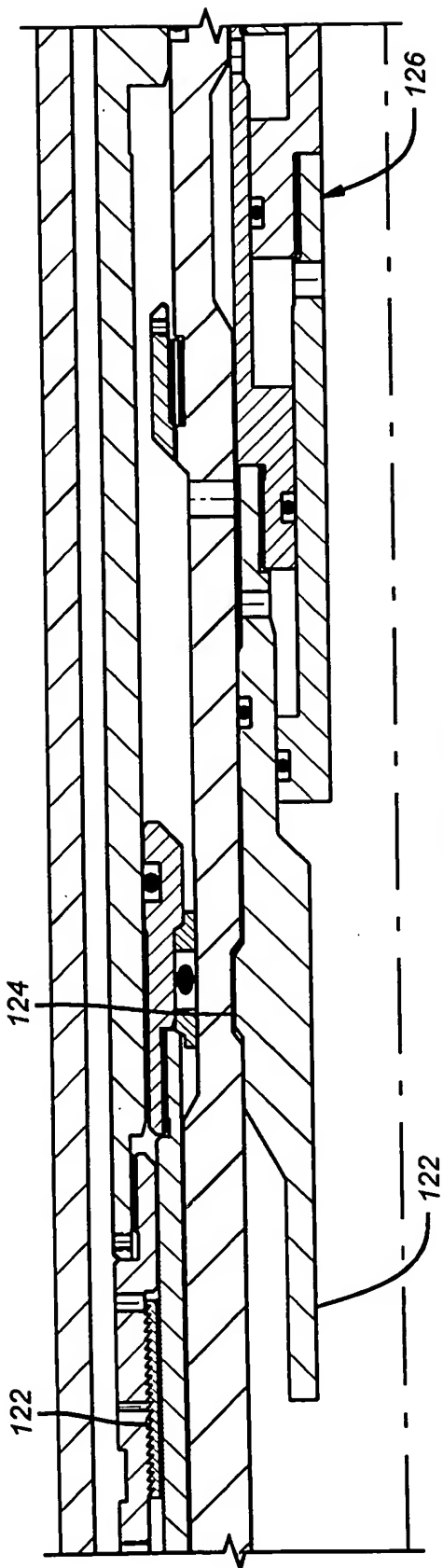


FIG. 10c

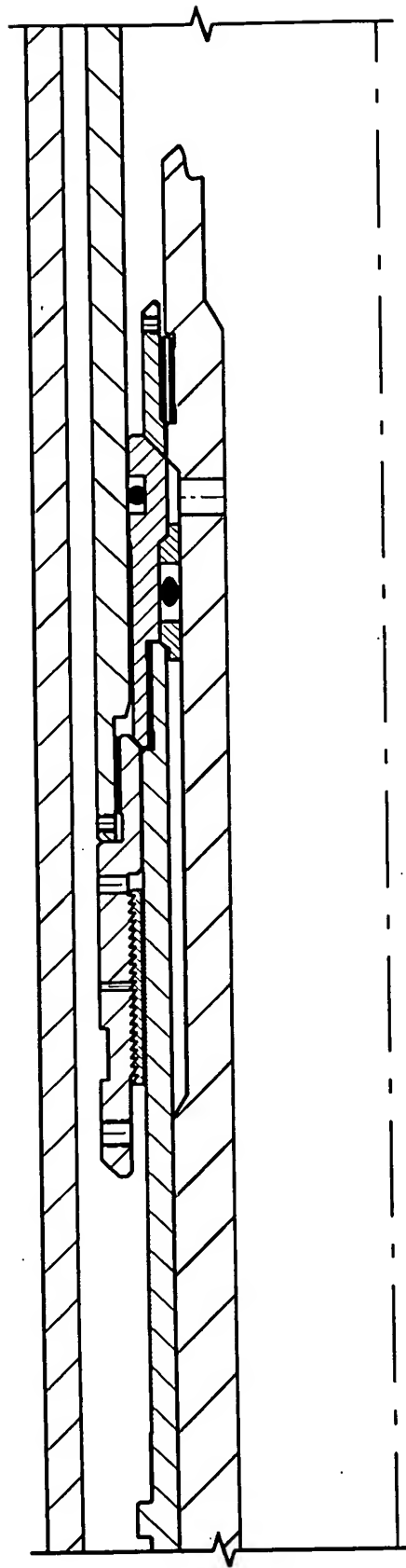


FIG. 11c

+

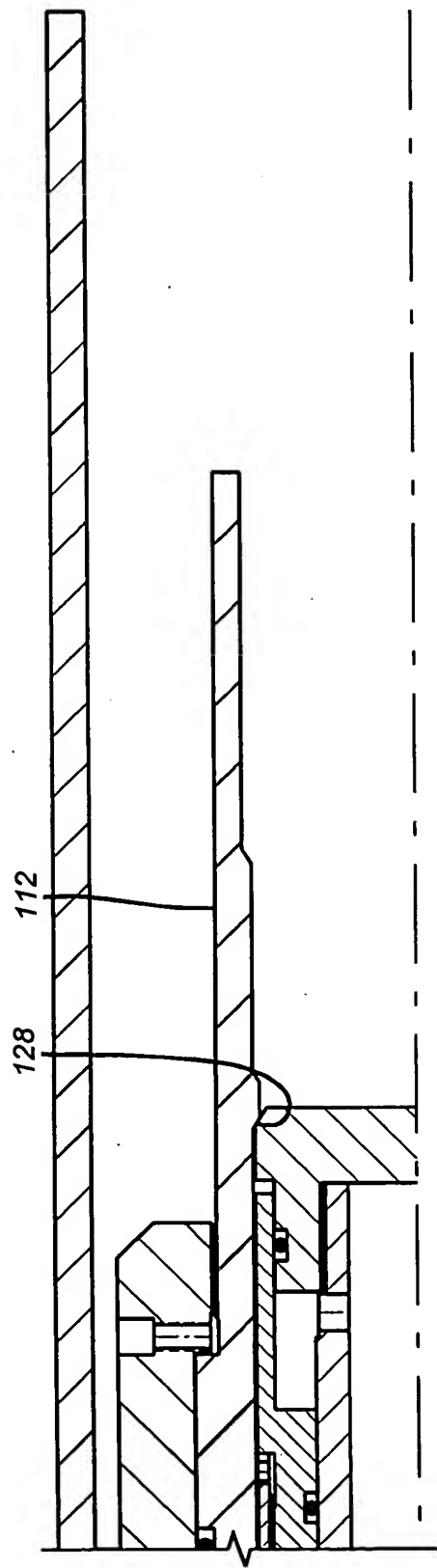


FIG. 10d

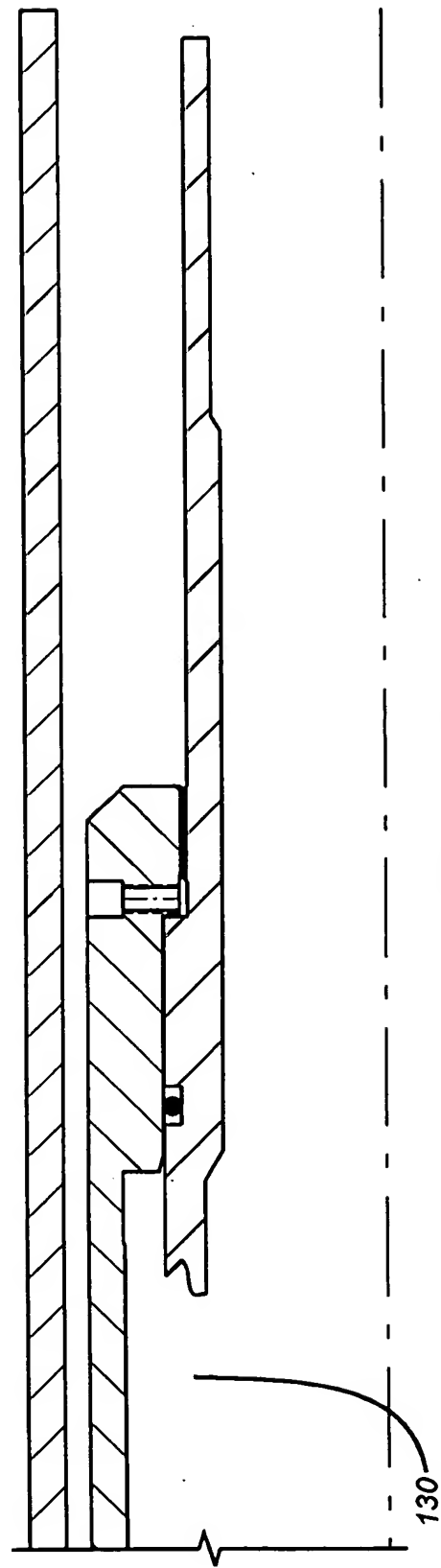


FIG. 11d

+

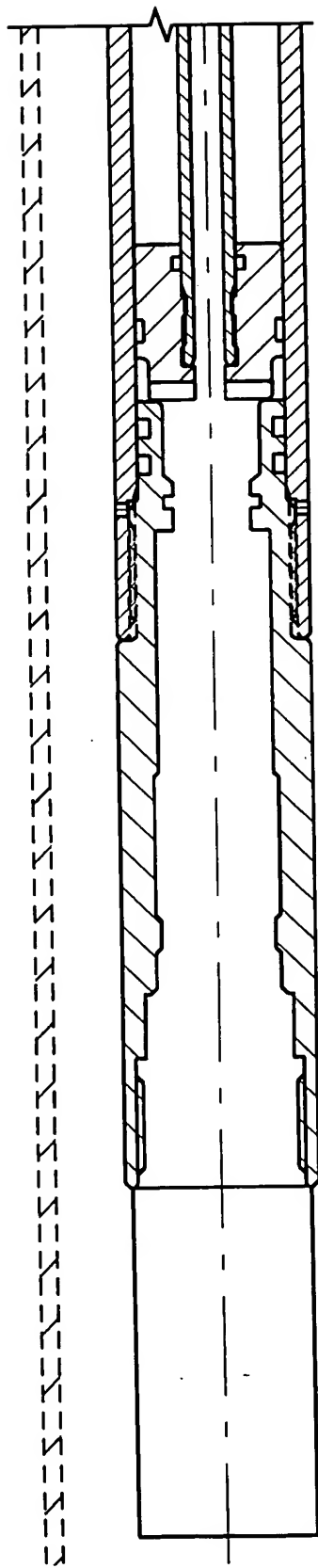


FIG. 12a

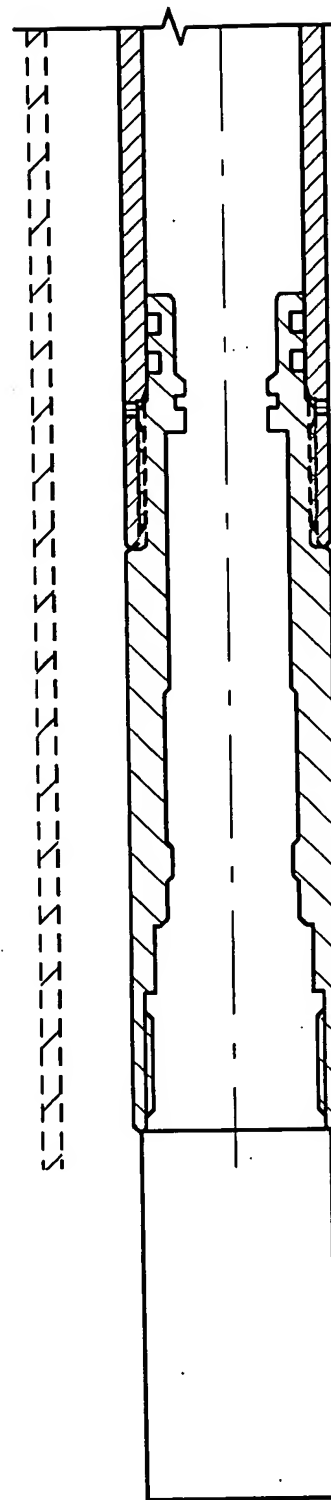


FIG. 13a

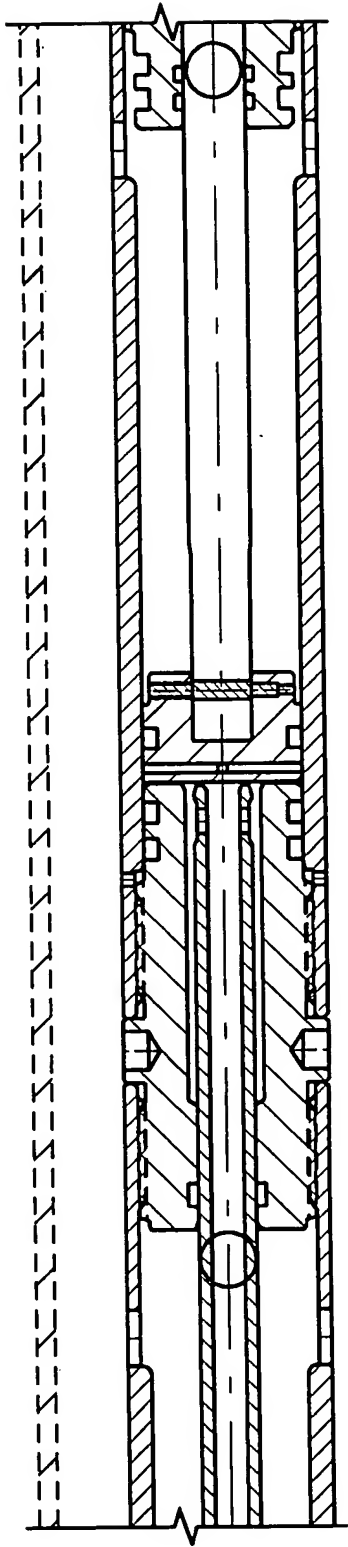


FIG. 12b

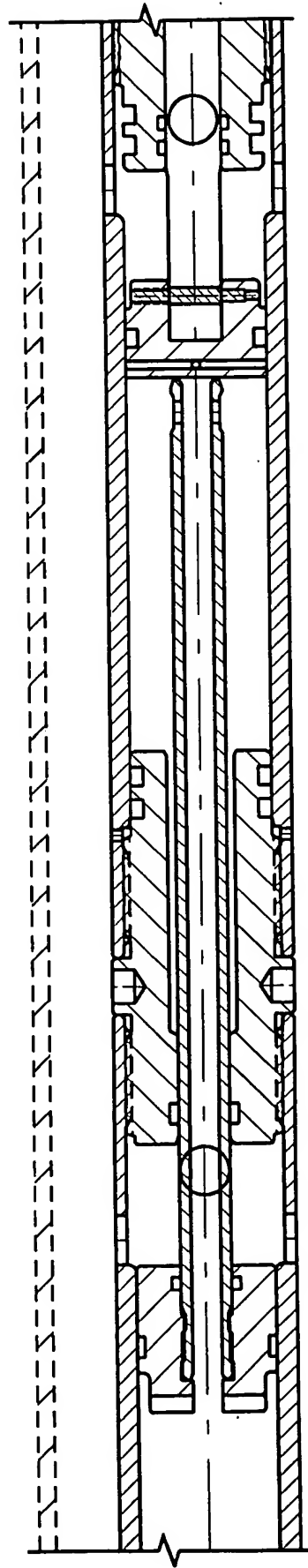


FIG. 13b

+

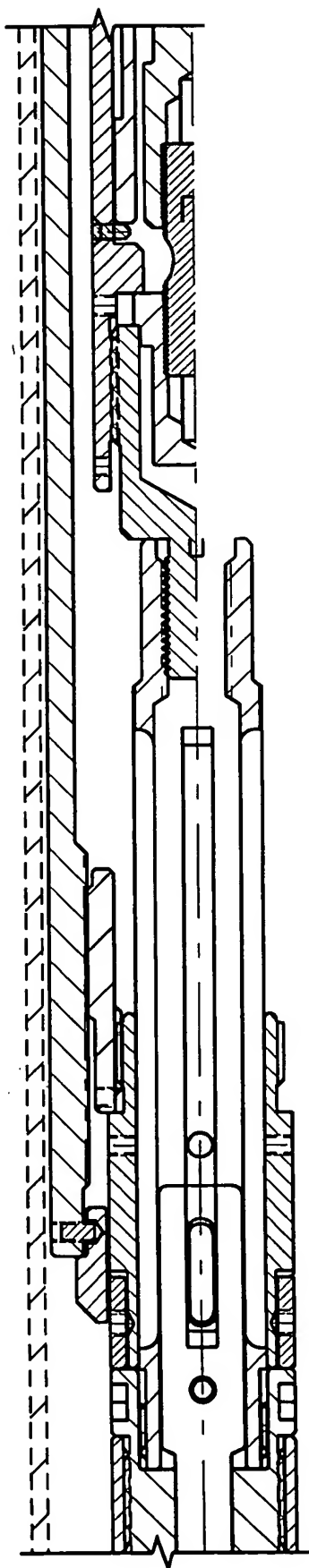


FIG. 12c

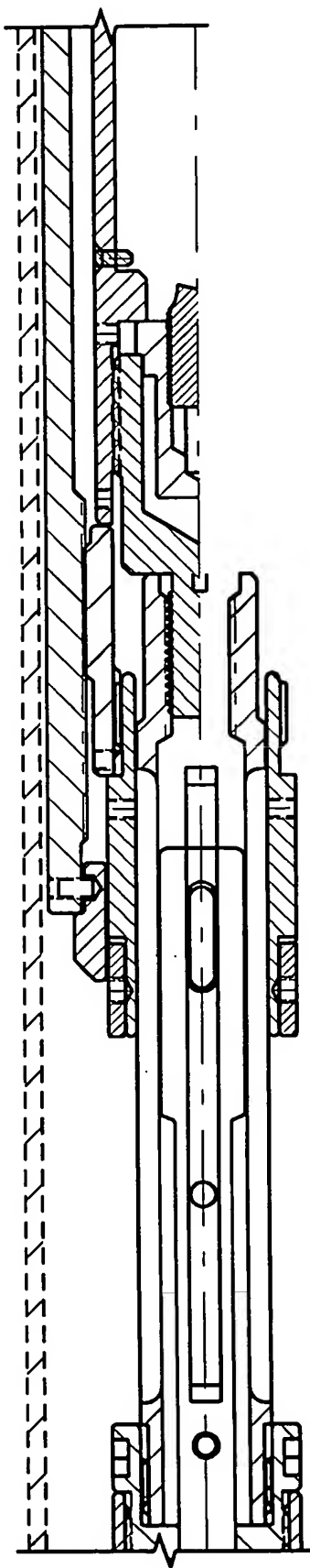


FIG. 13c

+

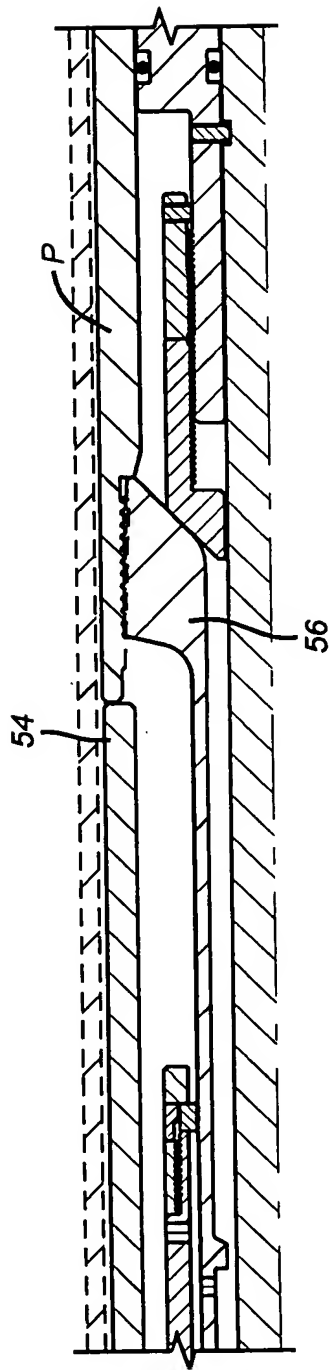


FIG. 12d

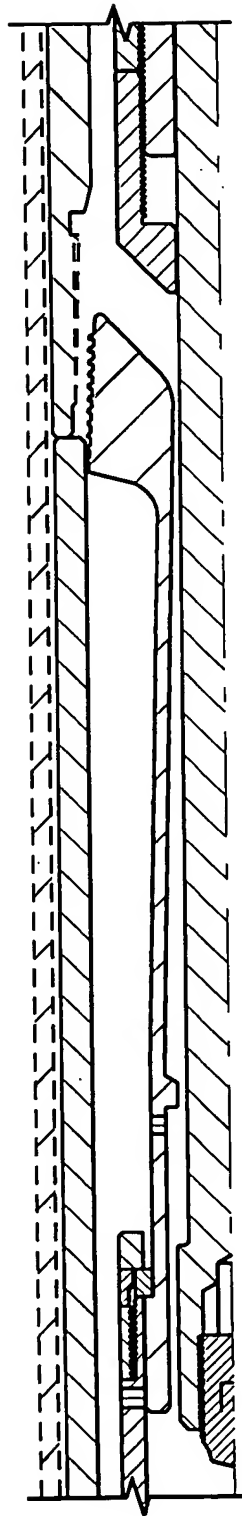


FIG. 13d

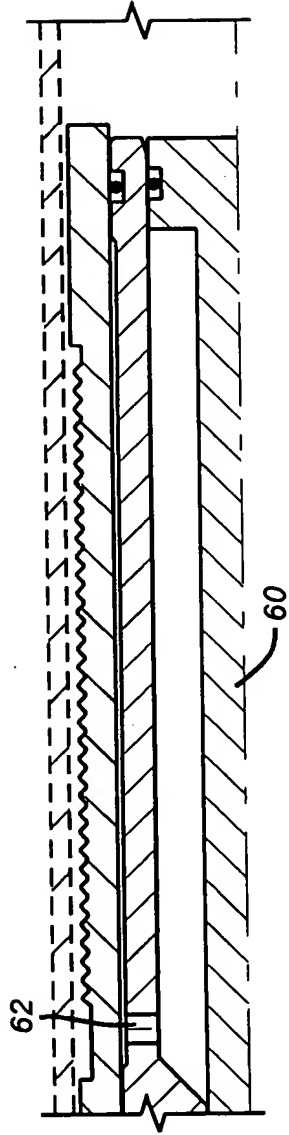


FIG. 12e

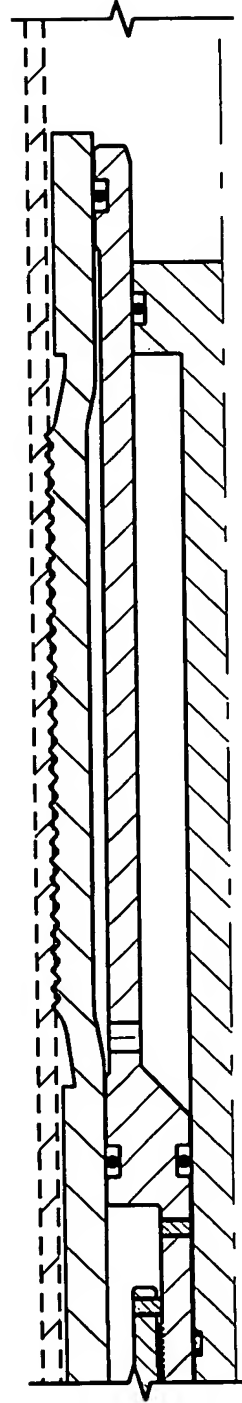
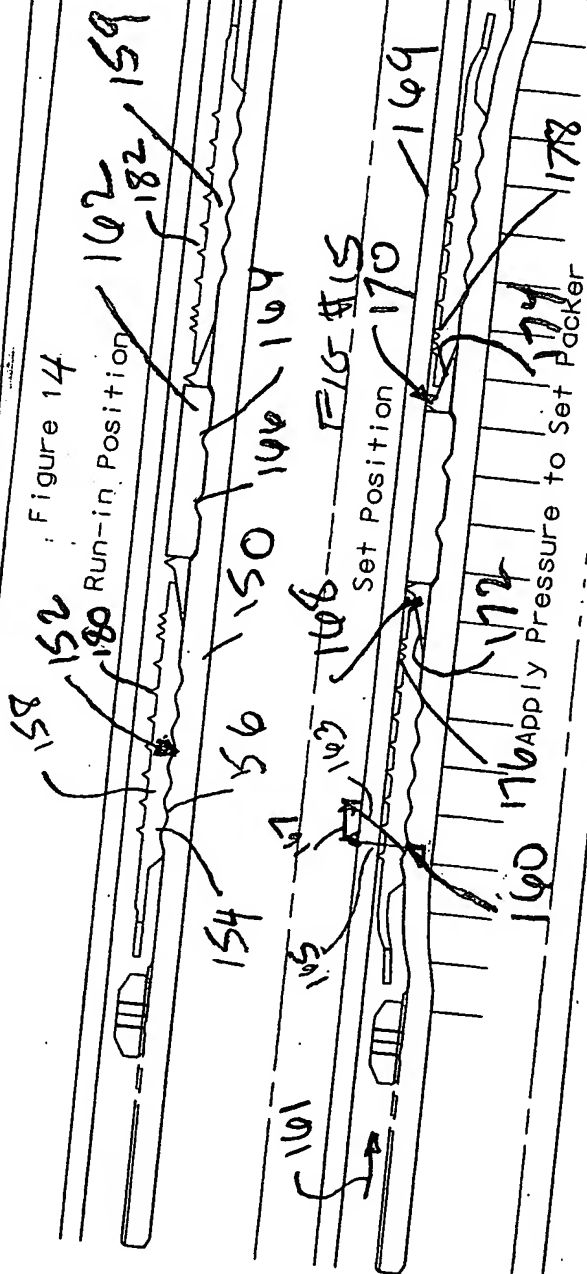


FIG. 13e

Figure 14



Expandable Packer - Set Position

Collet Fingers - Contact more of the casing circumferentially

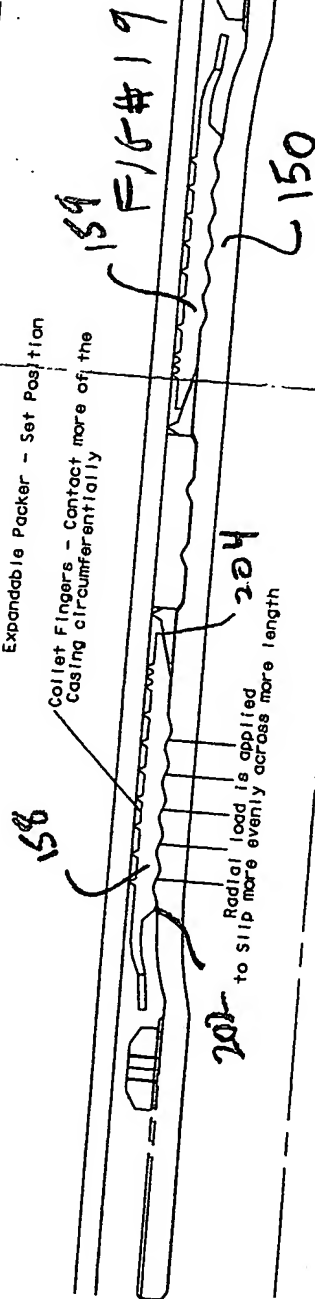


Figure 10 - Low Casing Stress

CPA 17A2T

Conventional Packer - Run-In Position

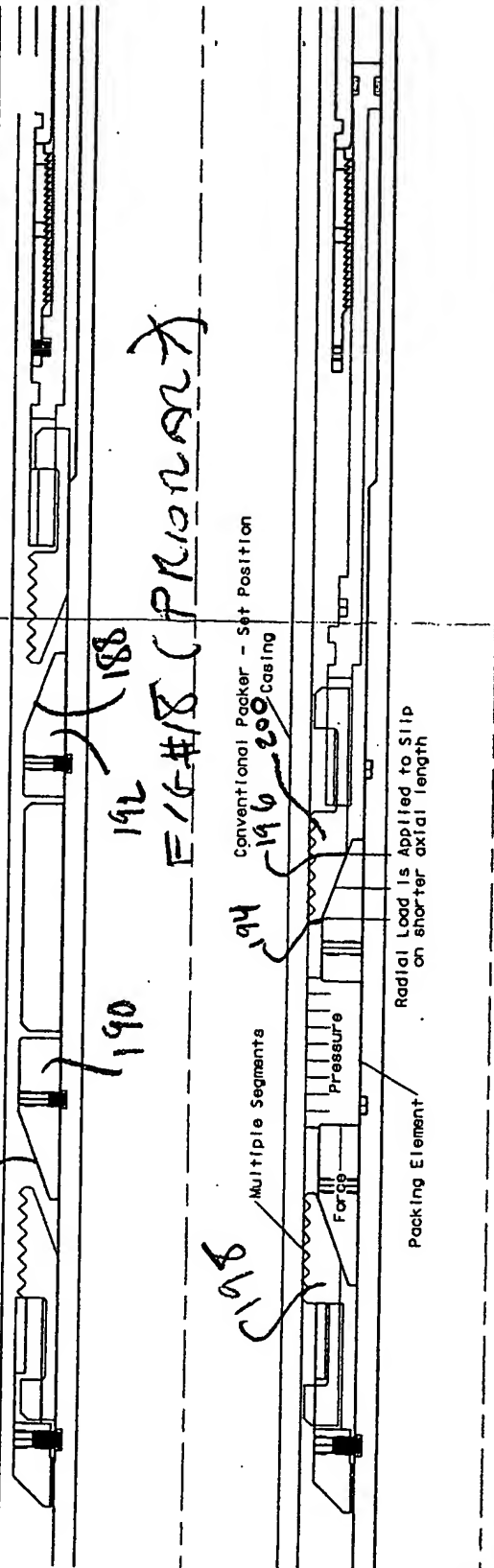
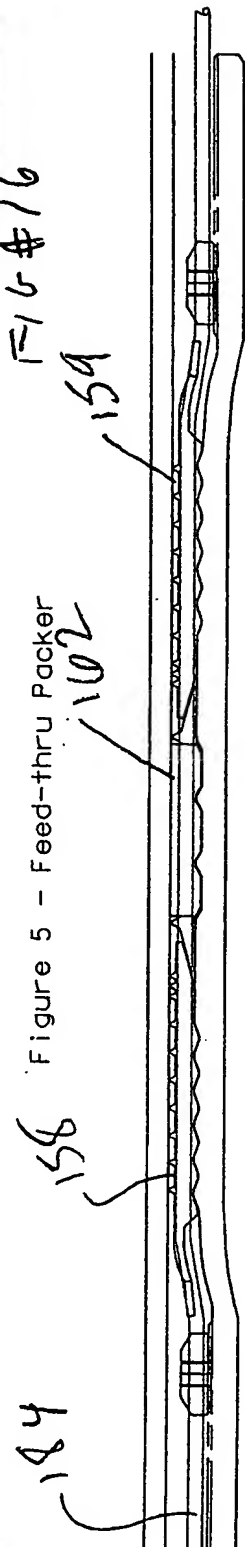


Figure 5 - Feed-thru Packer

File # 16

59

1102



thru Line

FIG 20

FIG 21

Figure 7

FIG 22

FIG 23

Drilling Plug

Plug Drilled out

Shear-off Bit

Set Packer

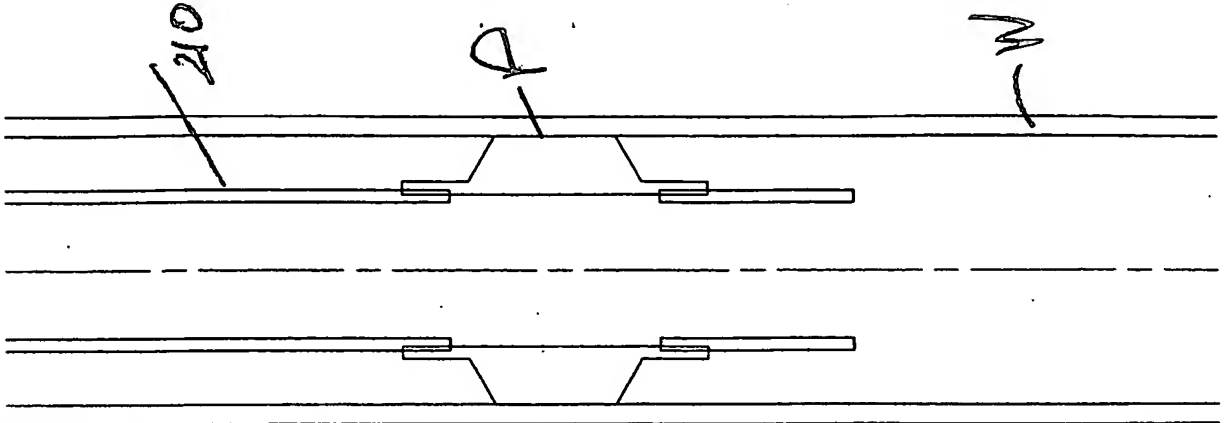
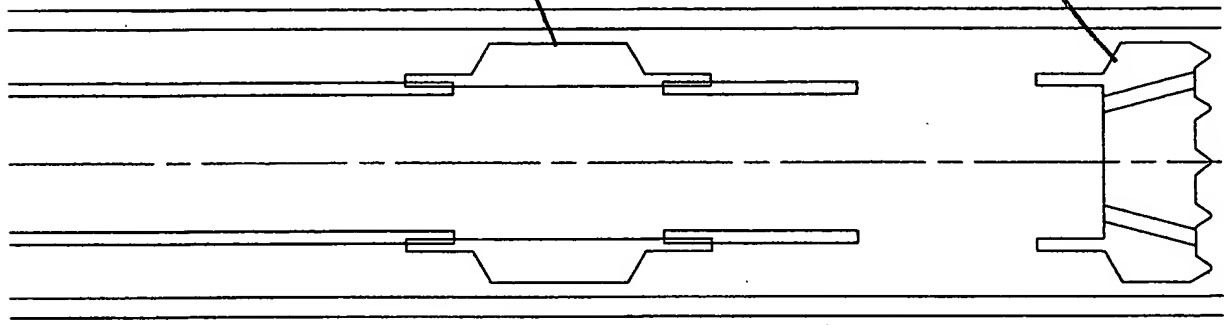
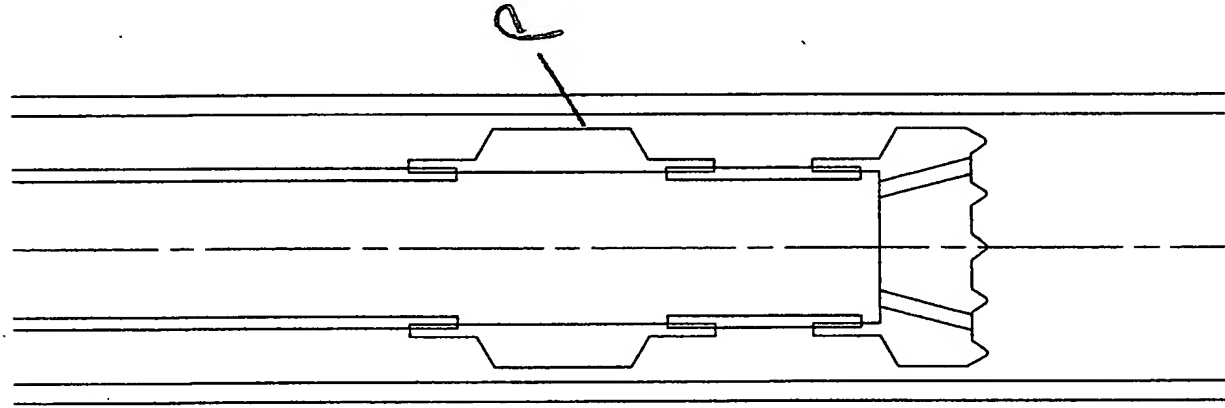
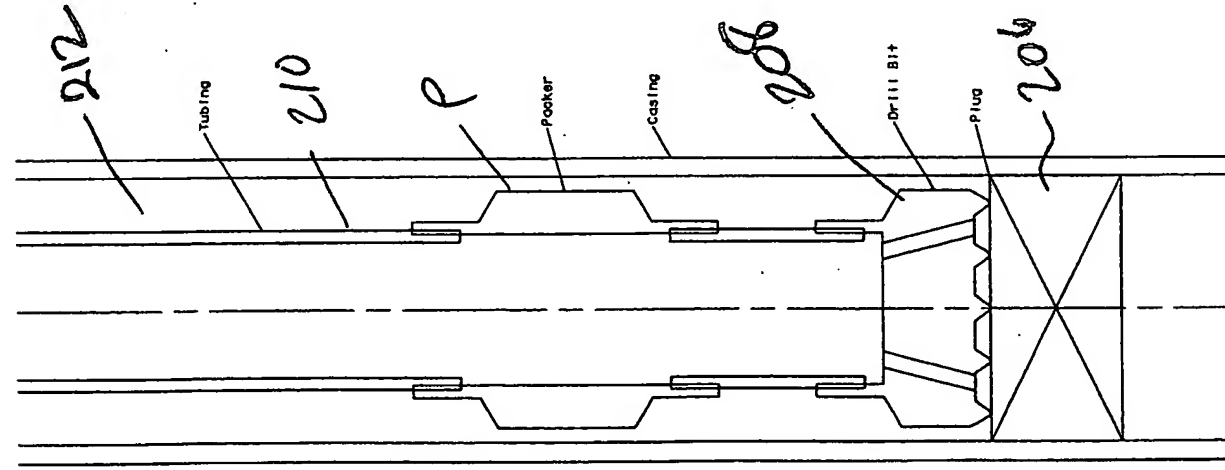


Figure 8
Liner Hanger & Liner Top
Isolation Packer

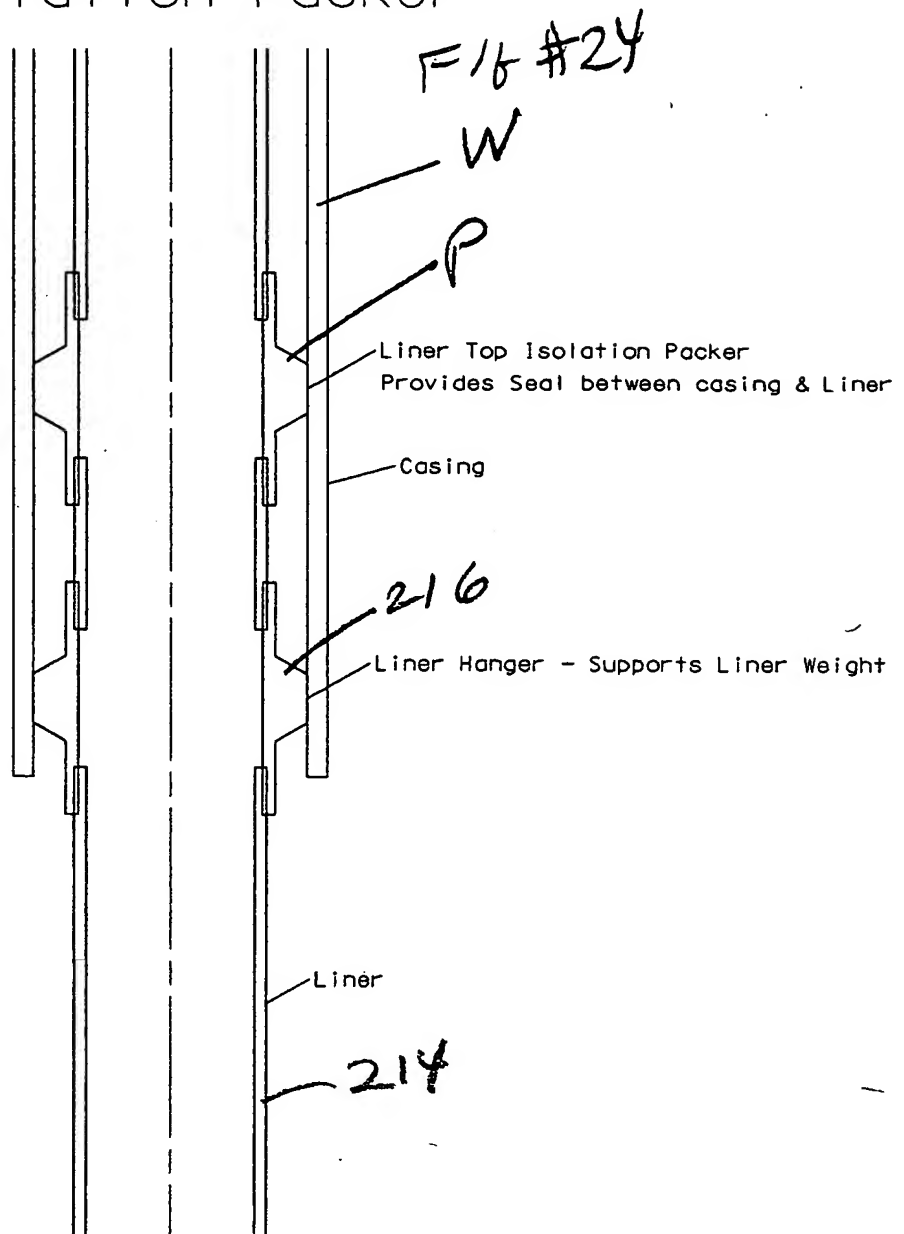


Figure 9

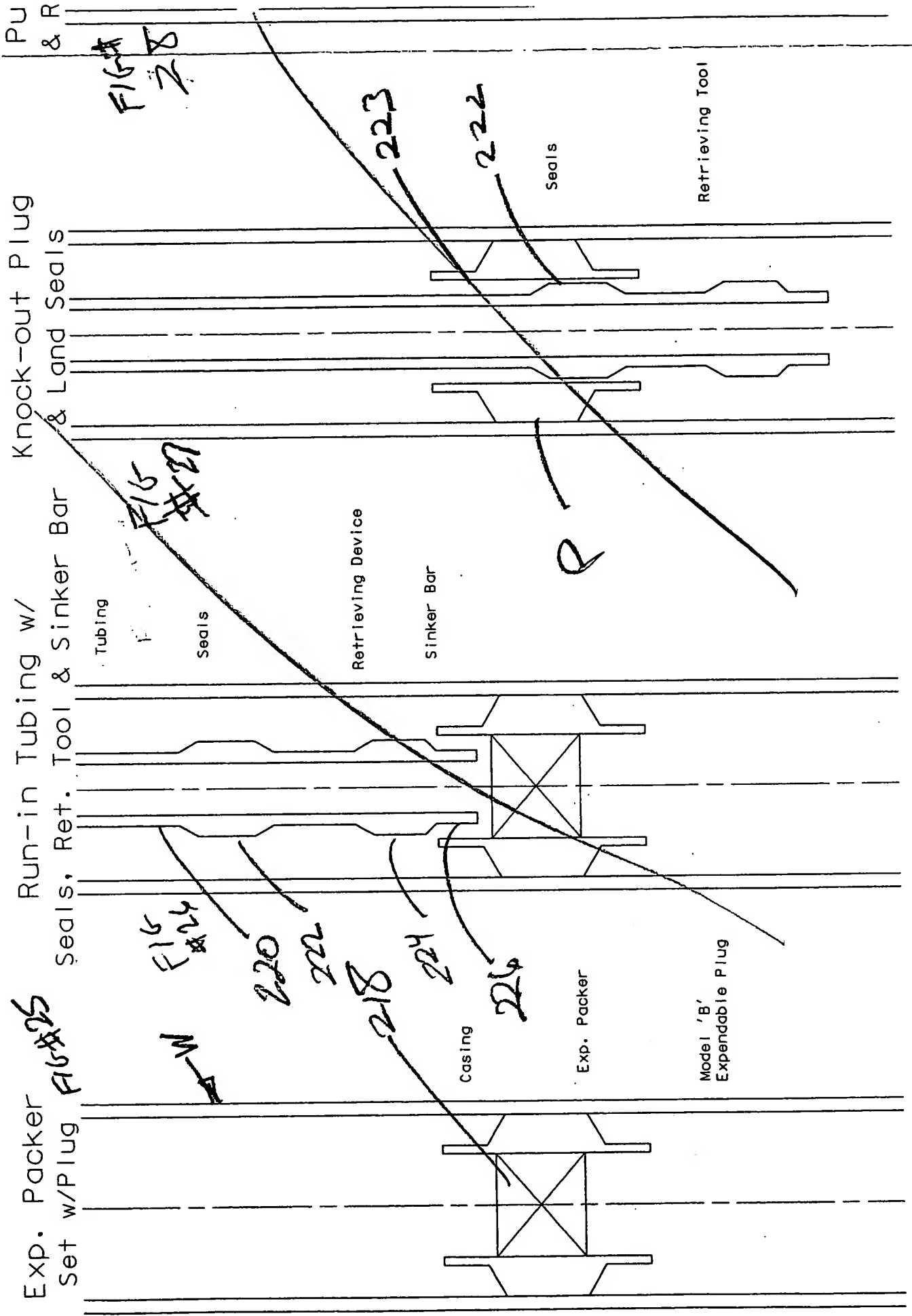


Figure 9

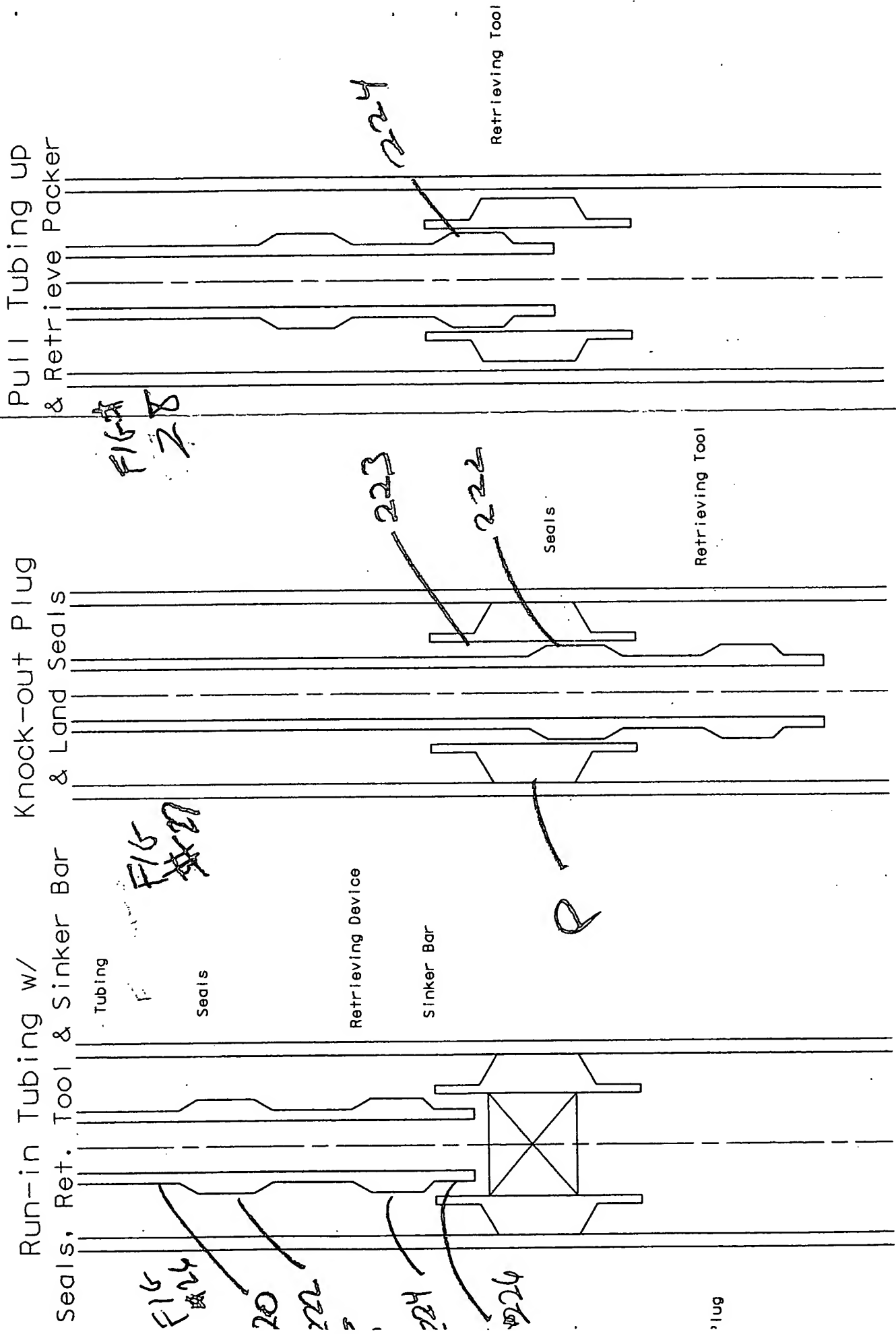


Figure 4- One Trip Hydraulic Set Packer

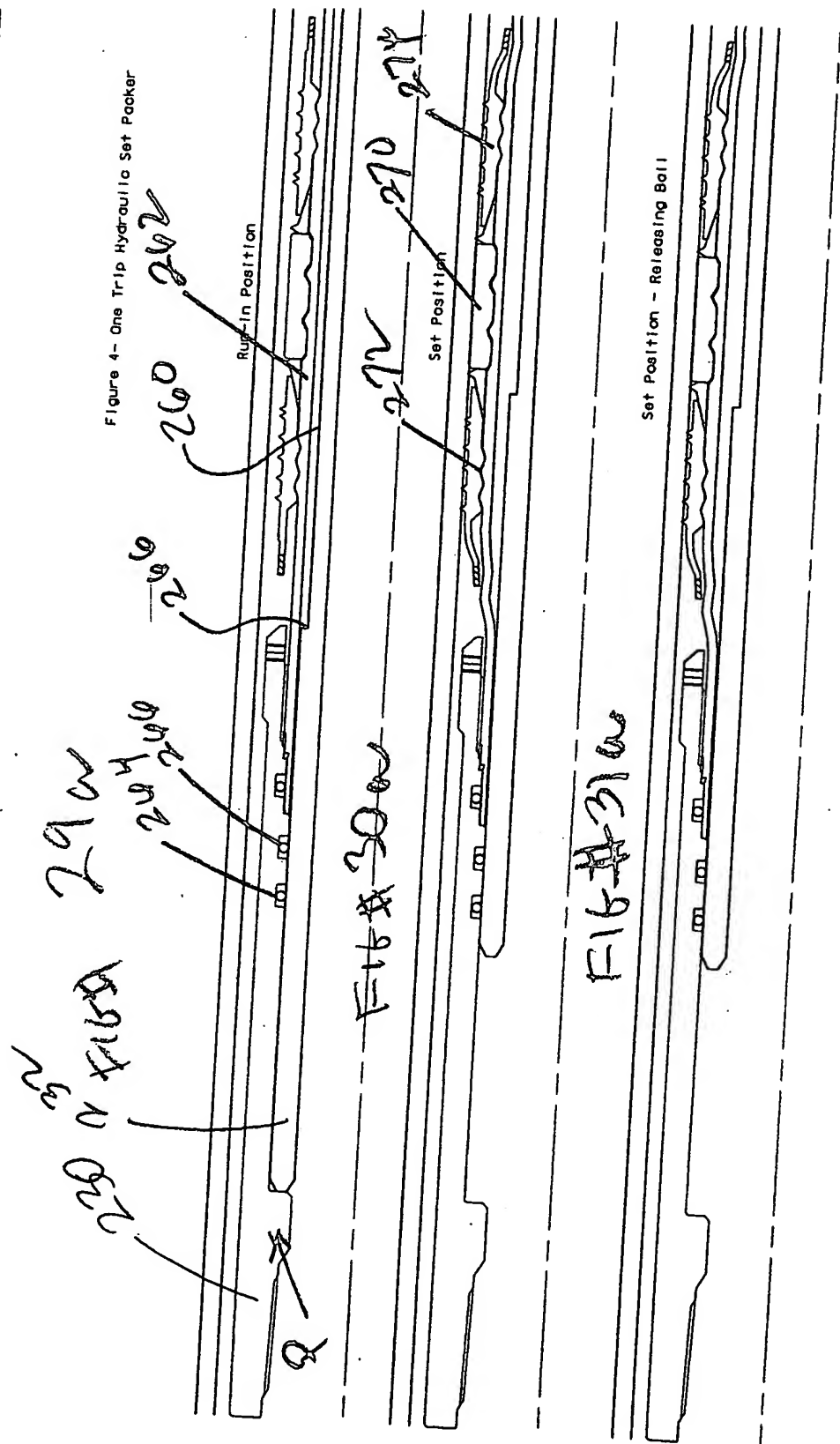
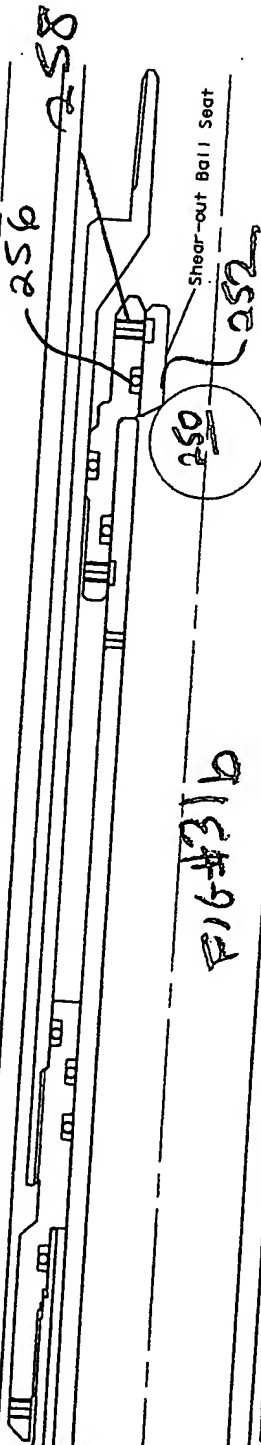
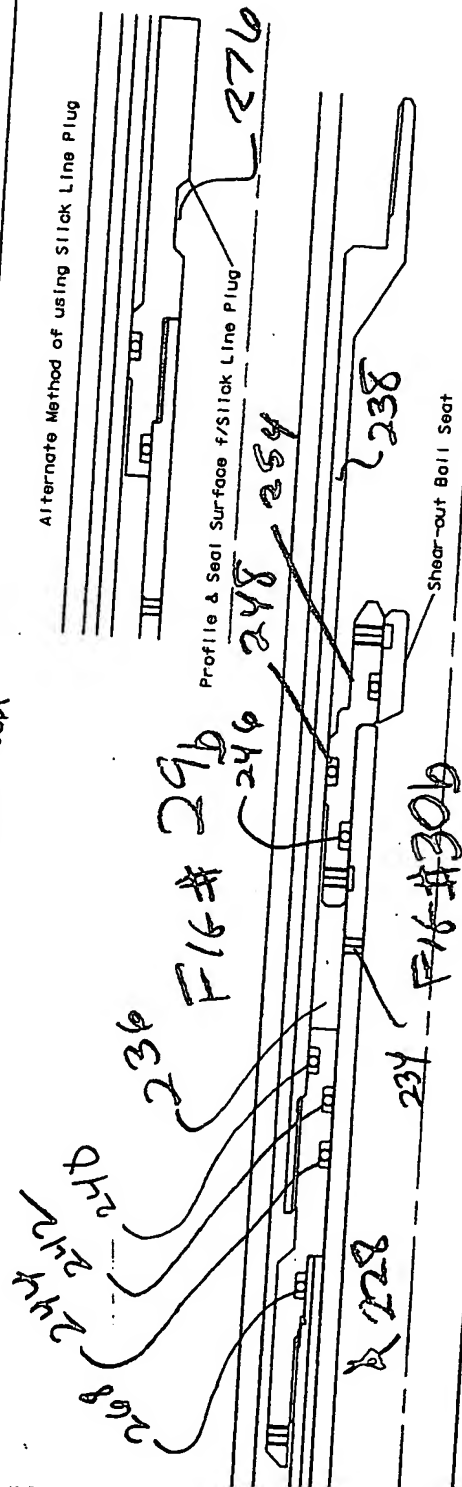


FIGURE 2001

Alternate Method of using Silik Line Plug



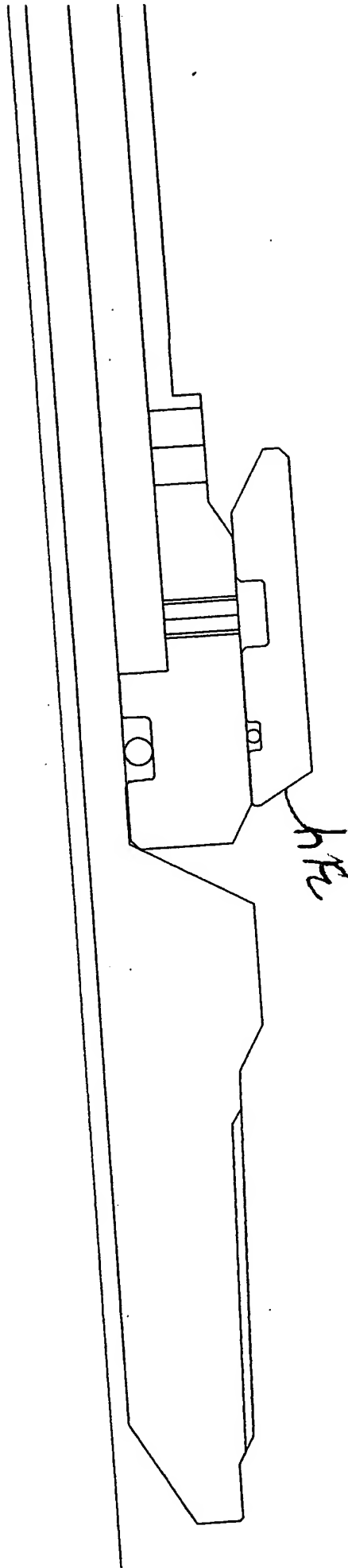


FIG 33a

FIG # 33b

2 318

320 322 318

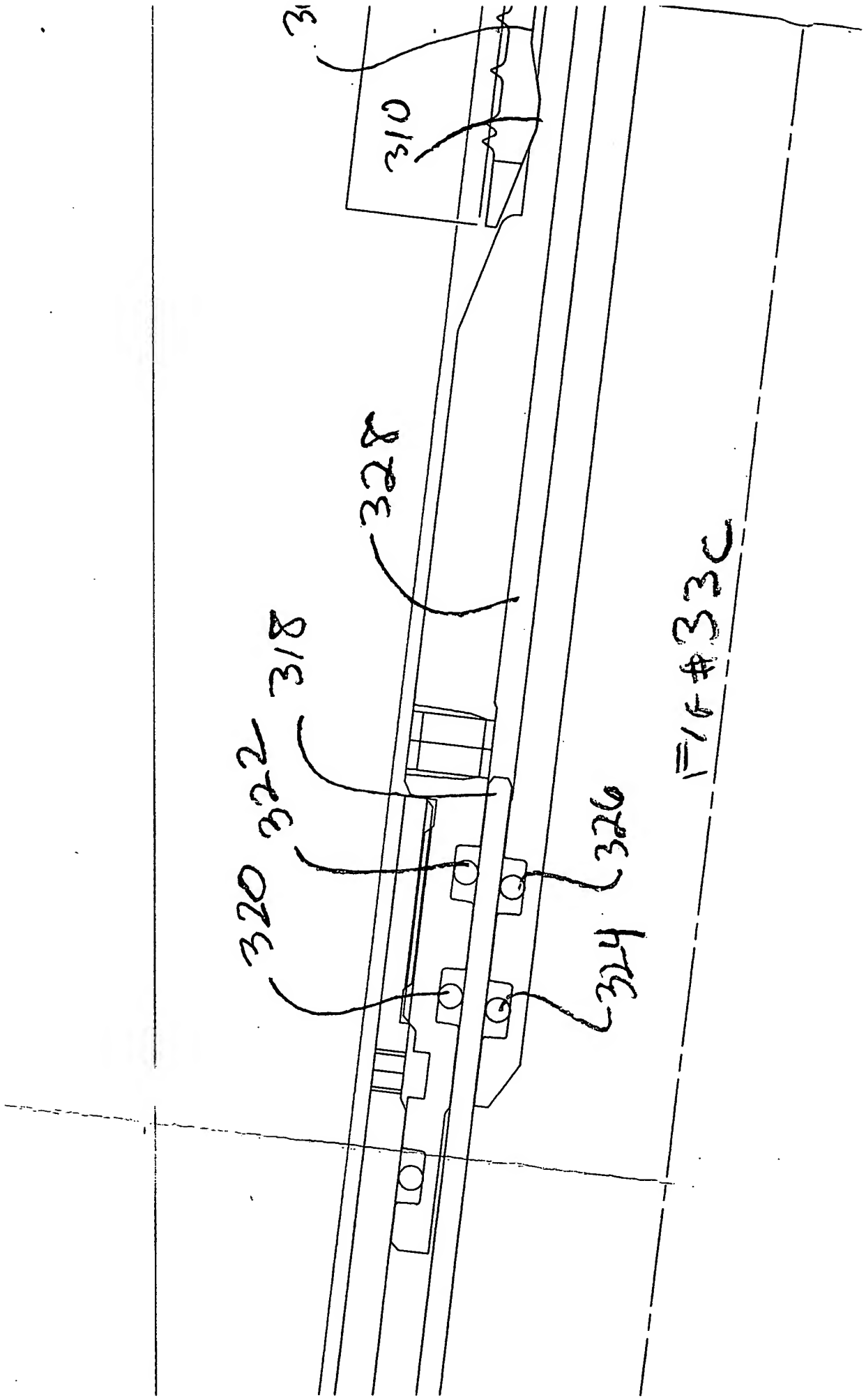
328

310

31

324 326

1-16 #33C



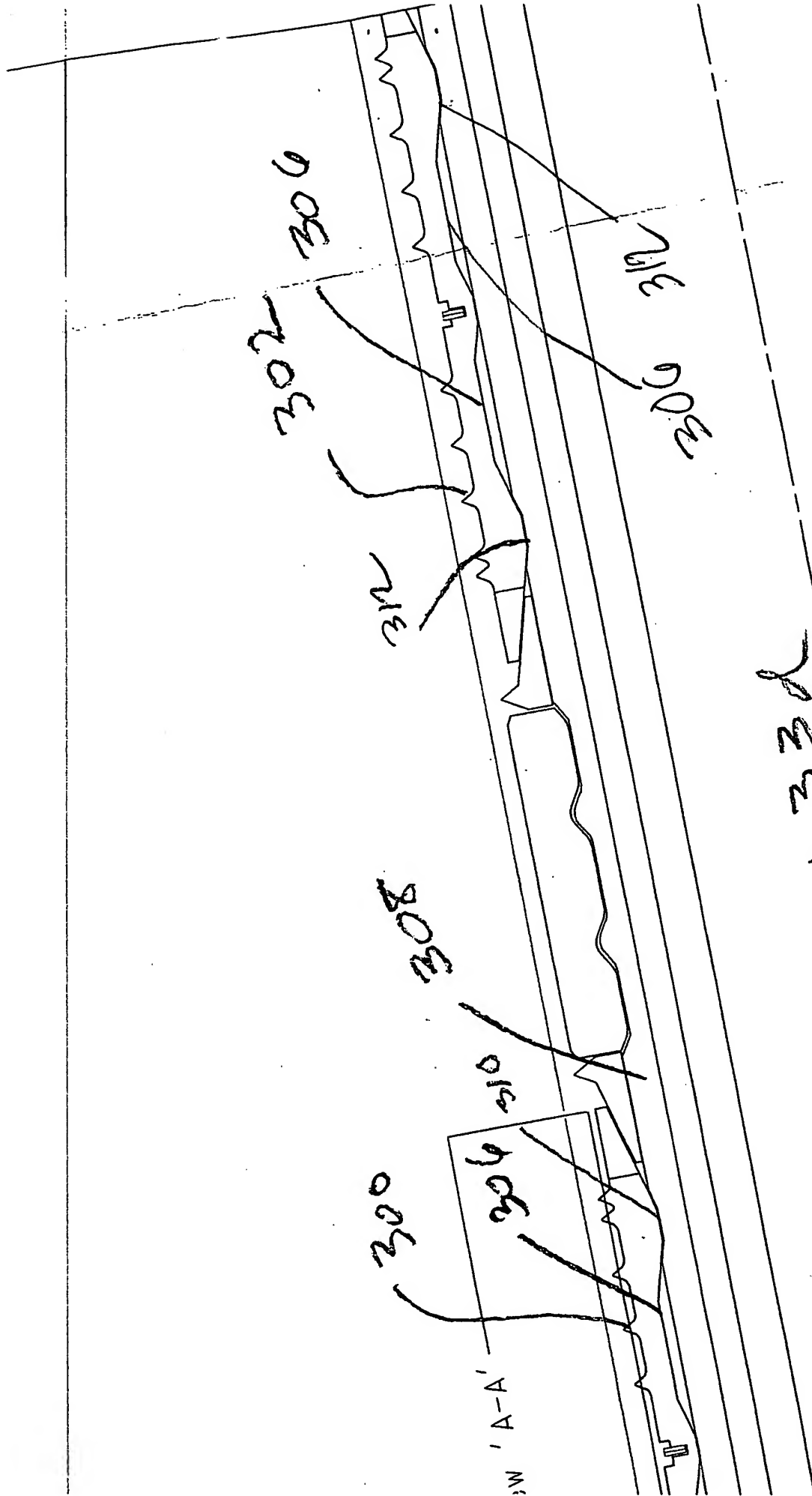
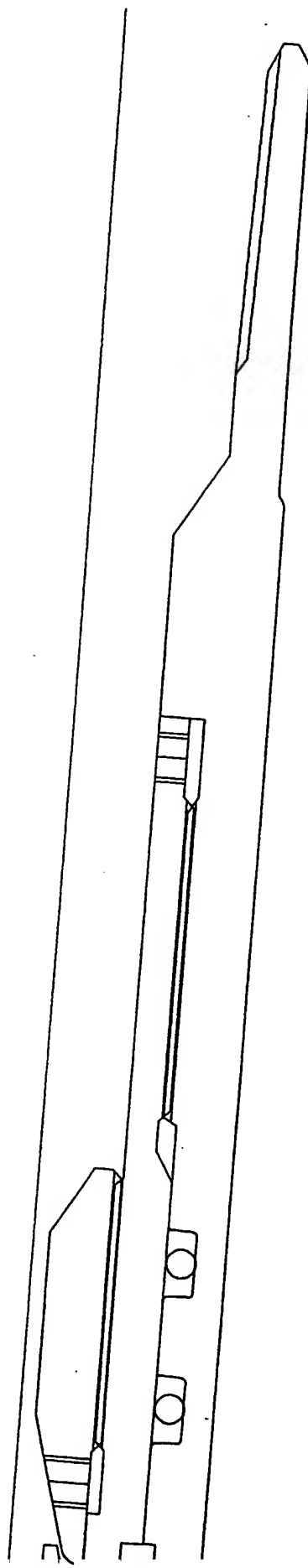
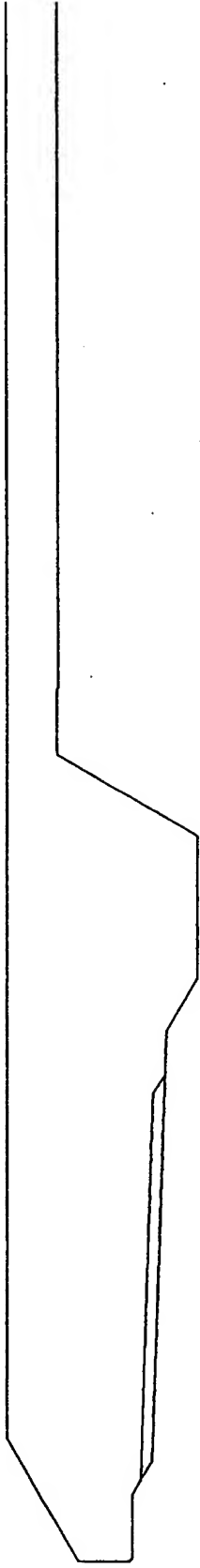


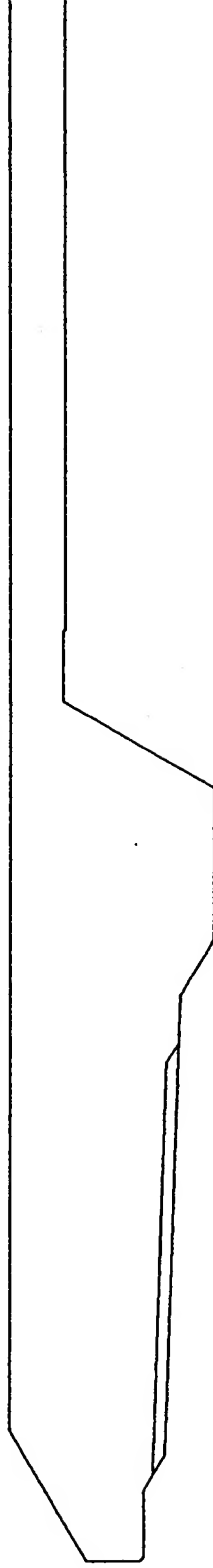
Fig # 33d



F16A33C



F16#34a



F16#35a

F16#346

F16#356

316

~~FIG 34C~~

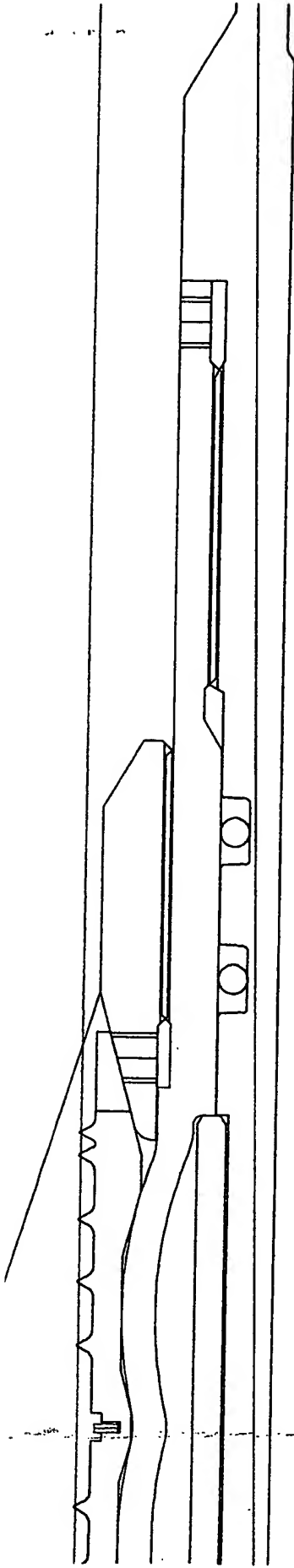
~~FIG 35C~~

330

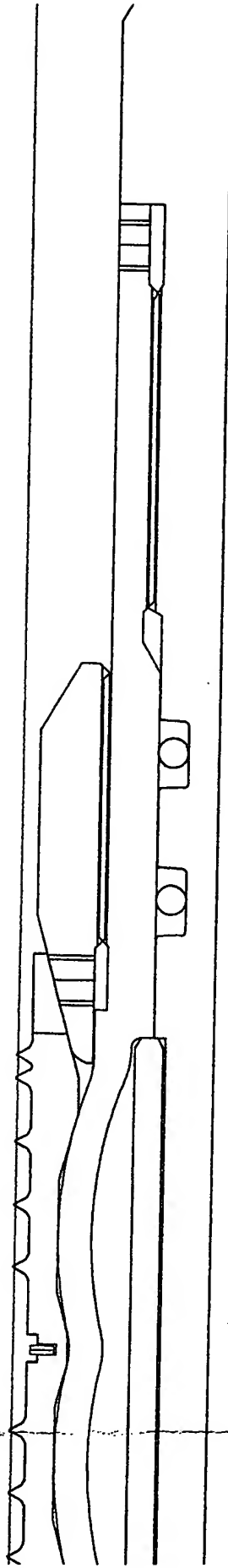
Expansion Mandrel forms in void in Slip Mandrel

16#34d

16#35d



F16A 342



F16A 352

AS #38
FIG 38

